A Comparison of the Content and Management of Worry in Younger and Older Anxious Adults

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Declaration

I declare that the work contained within this thesis is my own.

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Abstract

Clinical impression suggests that worry is a significant problem for many older adults, but very little research on worrying has used older adults as a sample group. Some recent research suggests that older adults may differ somewhat from younger adults in the nature of their worry and the strategies they use to control it. The present study compared a group of adults over 65 years of age with a group of adults under 65 on various measures of worry. All participants were recruited from psychology and psychiatry departments where they were receiving treatment for an anxiety disorder. Both groups completed the same questionnaire battery: the Hospital Anxiety and Depression Scale (HADS), the Penn State Worry Questionnaire (PSWQ), the Anxious Thoughts Inventory (AnTI) and the Meta-Cognitions Questionnaire (MCQ). A semi-structured interview investigating the strategies participants used to control their worrying was also administered. Participants who did not reach the cut-off score on the PSWQ or whose score on the depression scale of the HADS was higher than their score on the anxiety scale had their data excluded. The remaining data was analysed, the results were presented and the conclusions were discussed.

Contents

1. Introduction

1.1. Origins of the Study of Worry

If asked, most people could report several experiences of worry, and could probably describe how they felt. Both clinical experience and general observation would suggest that it is an extremely common phenomenon. Despite, or indeed perhaps because of, this it is only very recently that the concept has received any serious attention from researchers. The study of worry has its origins in the test anxiety literature. Deffenbacher (1980) discussed the existence of two components in test anxiety – worry and emotionality. Emotionality was seen as the 'affective-physiological experience generated from increased autonomic arousal' (Deffenbacher, 1980; p.112) and worry as the 'focusing of attention on concerns about performance, consequences of failure, negative self-evaluation, evaluation of one's ability relative to others, and the like' (Deffenbacher, 1980; p.112). In other words, test anxiety was split into an emotional-physical component and a cognitive component. In his review of the relevant literature, Deffenbacher (1980) concludes that not only does worry negatively affect test performance, but also that it does so to a greater extent than emotionality.

This finding led researchers to consider whether or not a similar pattern could be found with other forms of anxiety, and work in this area began in earnest in the 1980's. This was linked to the appearance of Generalised Anxiety Disorder (GAD) for the first time in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1980). This cited 'anxious expectation' as a feature of GAD, and by the time the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders was published in 1994 worry had become the defining characteristic of GAD.

> The essential feature of Generalised Anxiety Disorder is excessive anxiety and worry (anxious expectation), occurring more days than not for a period of at least 6 months, about a number of events or activities.
> (American Psychiatric Association, 1994; p.432)

Given the high prevalence of GAD (1-year prevalence = 3%, lifetime prevalence = 5%; DSM-IV, 1994) it is not surprising then, that throughout recent years the interest in worry as a topic for research has increased considerably as its importance has gradually become apparent.

1.2. What is Worry?

1.2.1. The Nature of Worry

One of the first groups to attempt to explore and define the nature of worry was Borkovec, Robinson, Pruzinsky & DePree (1983). They developed a working definition of worry as:

> A chain of thoughts and images, negatively affect-laden and relatively uncontrollable. The worry process represents an attempt to engage in mental problem-solving on an issue whose outcome is uncertain but contains the possibility of one or more negative outcomes. Consequently, worry relates to fear process.
> (Borkovec et al, 1983; p.10)

Borkovec et al (1983) began to examine the nature of worry by applying the test anxiety paradigm of worry as the cognitive component of anxiety and emotionality as the physiological component. They correlated the results of several affective and problem-oriented questionnaires routinely given to undergraduate psychology students, and in addition asked the participants how much they worried and how tense they generally were. They found the ratings of worry and general tension were highly correlated (0.680), and that social-evaluative events were of most concern to participants who worried. Degree of worry was also related to anxiety and depression.

A subsequent study reported in the same paper looked in more detail at participants' experience of worry. They recruited 74 non-clinical volunteers (mostly students) and asked them in more detail about their worries. They found that worry content was mostly associated with the future for people who designated themselves as worriers as well as for those who did not, and that worriers and non-worriers worried about the same things, although perhaps to different degrees. However they also found that worriers reported greater difficulty in stopping worrying thoughts once they had started. This went some way towards confirming their belief that problematic worry was 'relatively uncontrollable', although their method of differentiating between worriers and non-worriers (i.e. simply by asking participants whether they considered themselves to be worriers) was not perhaps a rigorous as it could have been.

A final study reported by Borkovec et al (1983) involved a sample of 60 students, half of whom considered worry to be a problem for themselves and half of whom did not. The participants were divided into three groups, given a number of pre-test measures and asked to focus on their breathing for a period. Then one group was told to worry for 30 minutes, one group to relax for 30 minutes and the final group to relax for 15 minutes and then worry for 15 minutes. All participants then had to repeat the focusing task. The results showed that participants who felt themselves to be worriers were less able to focus on their breathing and reported more negative intrusive thoughts than did the non-worriers. However worriers and non-worriers did not differ on the number of other distractions. This would suggest that worriers are particularly prone to attending to negative thoughts, something that Wells (1994,1997) enlarged upon as part of his theory of meta-worry (discussed in Section 1.4). Interestingly, Borkovec et al (1983) also found that while the number of distracting negative thoughts in the focusing task decreased following both 30 minutes of relaxing and 30 minutes of worrying, they increased following the 15 minutes of worry condition. This lead Borkovec et al (1983) to hypothesise that extended worrying could lead to extinction while short periods of worry could lead to incubation.

Borkovec, Wilkinson, Folensbee & Lerman (1983) examined this hypothesis further by designing a treatment package for self-identified worriers based on this principle. Worriers were taught to identify their worrying cognitions, and to set aside a 30 minute period every day when they would be 'allowed' to worry. If they caught themselves worrying at any other point in the day they had to postpone their worrying until the allotted time. They found that this treatment led to a decrease both in the percentage of the day spent worrying and in the amount of focus on unrealistic change. However although there was a no treatment control group, the authors did not have a placebo treatment group, leaving the possibility of at least part of the effect found being due to non-specific factors.

Tallis, Davey & Capuzzo (1994) carried out an extensive investigation into the phenomenology of worry in a non-clinical population. Participants completed the Penn State Worry Questionnaire (Meyer, Miller, Metzger & Borkovec, 1990) (a measure of degree of worry not related to content), the Worry Domains Questionnaire (Tallis, Eysenck & Mathews, 1992) (a measure of the content of worry) and a questionnaire giving quantitative and qualitative information about worry. The most commonly reported worries were related to work, academic performance, health, finances and relationships, in that order. However it is important to bear in mind that the sample consisted of full and part time students. Therefore these worries may well be more relevant to this sample than to the population as a whole. This is obviously true of academic performance worries, but could also apply to the other worry domains highlighted.

Participants reported that worry was most likely to be concerned with present concerns, followed by future concerns and lastly the past. Results also showed that participants were likely to attempt to stop their worry, and that this was somewhere between 'slightly' and 'quite' difficult to do. The most commonly used coping strategies were problem-solving and distraction, with relaxation and talking to others also both fairly prevalent. Participants reported that the successful implementation of these strategies 'rarely' had any negative affective consequences, but only a third said that this never happened. This would suggest that at least occasionally there are costs associated with successful coping with worry.

The data regarding the degree of perceived 'realisticness' of worry indicated that participants felt their worries to be related to real problems. The majority (59.5%) reported that the unpleasant events about which they worried were either 'a little likely' or 'quite likely' to actually occur. Nevertheless most of the sample indicated that with respect to past worries the feared negative consequences were not as bad as they had anticipated them to be, and 67.6% of the participants agreed that worrying about things made them seem worse. This could suggest that while worries are appraised as realistic at the time they actually being worried about, when they are reflected on at a later date they may be perceived to have been negatively biased.

Participants were also asked what the consequences of their worrying was for them These were separated into positive and negative consequences. The main costs of worrying were that it led to pessimism and a negative outlook, it exaggerated the original problem, it disrupted performance of other tasks and it increased emotional discomfort. The most commonly reported positive consequences of worrying were that it acted as a motivator and led to preparatory and analytic thinking.

Tallis et al (1994) also looked at the differences between high and low worriers as designated by their scores on the Worry Domains Questionnaire. High worriers reported more frequent episodes of worry, more mood disturbance, more difficulty stopping worrying, more recurrence of worry if they did manage to stop it, more impairment of everyday functioning and a greater perceived negative effect on their health caused by their worrying.

However even the high worriers in the above study were not clinical cases. Therefore Craske, Rapee, Jackel & Barlow's (1989) study looking at qualitative differences between the worry of normal and GAD participants is highly relevant. Participants were asked to complete questionnaires about their worry on three occasions as soon as possible following an occurrence of worry. They found that GAD participants were more likely to worry about their health than controls, and that controls were more likely to worry about their finances than the GAD group. Controls were also more likely to be able to identify a specific precipitant to their worry than GAD participants, while the GAD group rated their worry as more uncontrollable, less realistic and less likely to be reduced by action. The two groups did not differ in terms of attempts to resist their worry, the duration of worry or the maximum level of anxiety experienced while worrying.

Both these studies would suggest that an important feature of pathological, as opposed to normal, worry is the perceived degree of control an individual has over it. Pathological worrying may also be more likely to focus on health concerns, and to be appraised as unrealistic.

1.2.2. Worry and Obsessions

More recent research has moved away from the idea of worry being similar to fear, and much has been learned about worry from studies instead focusing on the similarities between worries and obsessions. This stems from the similarity between GAD and obsessive compulsive disorder (OCD), in that both are characterised by negative intrusive thoughts. Turner, Beidel & Stanley (1992) reviewed the literature on worry and obsessions, and concluded that while being similar in some respects (e.g. both occur in normal as well as patient populations with similar form and content, but with greater perceived uncontrollability in clinical samples), there were several important differences between them. To begin with, while the content of worry is usually everyday things, the content of obsessions is often not, frequently having themes of religion, contamination and aggression. Second, worries tend to be thoughts, whereas obsessions can be thoughts, images or impulses. They also state that although both worry and obsessions are resisted, worry does not seem to be resisted as strongly, either cognitively or behaviourally, as obsessions are. In addition the content of obsessions is more likely to be perceived as 'unacceptable' and is more intrusive. A final point Turner et al (1992) make is that worry is more likely to have a perceived trigger than are obsessions.

Turner et al (1992) also state that direct empirical comparison of normal and clinical populations with worry and obsessions was required to clarify the conclusions they drew, and in recent years this has been addressed. Wells & Morrison (1994) compared worries and obsessions in a normal, non-clinical population by asking participants to complete diaries detailing the content, duration and triggers for two worries and two obsessions. The results showed worry to be consistently verbal in content, replicating the earlier finding of Borkovec & Inz (1990). Worry also lasted longer than obsessions, was seen as being more realistic, more voluntary and associated with a greater compulsion to act than obsessions. No differences between worry and obsessions were found in terms of intrusiveness, controllability, distress or resistance. This supports Turner et al's (1992) hypothesis that worry is

predominantly verbal, but does not support the theory that worry is less intrusive and less strongly resisted than obsessions.

There is however one important caveat to this study. Participants were provided with definitions of worry and obsessions to help them differentiate between them in their diaries. Worry was defined as 'a related chain of thoughts with a negative theme. Typical examples of worry include thinking about failures in the past or in the future, such as an impending job interview, or thinking about problems in a relationship' (Wells & Morrison, 1994; p.868). Obsessional thoughts were defined as 'a spontaneous, quick and sometimes recurrent thought that is unacceptable and/or unwanted. Typical examples of intrusive thoughts include thoughts of contamination or of hurting someone that you would not actually wish to' (Wells & Morrison, 1994; p.868). Although the results showed worry to be longer lasting than obsessions, this was almost predetermined by the definitions participants were given. One of the dimensions they were told to use to differentiate worry and obsessions was that worry was a 'chain of thoughts' and obsessions were 'a ... quick ... thought'. Therefore it could be argued that the two phenomena were artificially differentiated on this variable from the beginning.

Several other studies have compared worry and obsessions. Tallis & de Silva (1992) compared participants on the Worry Domains Questionnaire (Tallis et al, 1992), a visual analogue scale of worry and the Maudsley Obsessional-Compulsive Inventory (MOCI) (Hodgson & Rachman, 1977). Worry as measured by both the scales was significantly correlated with the checking and doubting subscales of the MOCI. This led Tallis & de Silva (1992) to hypothesise that perhaps worry is the cognitive equivalent of behavioural checking, in that it is an attempt to prevent the occurrence of a feared aversive consequence in the future. Clark & Claybourn (1997) looked at process characteristics in a non-clinical sample. They found worries to be more associated with the potentially negative consequences of everyday events and obsessions more focused on what the content of the intrusive thoughts means about the individual's character. Burns, Keortge, Formea & Sternberger (1996) revised the Padua Inventory, a common measure of OCD symptoms, in the light of research on the similarities between worry and obsessions.

They found that by restricting the questionnaire items to those based on the content of obsessions the scale could be made more independent of worry, highlighting the fact that the respective content of obsessional and worrying thoughts is one of their main distinguishing features.

In summary then, the research on the similarities and differences of worry and obsessions would seem to suggest several features of worry. Firstly, worry is related to obsessional thinking. Secondly, worry is mostly verbal in content. Thirdly, the content of worry is usually related to potential aversive consequences of everyday events. Finally, worry is resisted, although the extent to which this is occurs and how effective it is unclear.

1.2.3. The Functions of Worry

Currently there are two main related hypothesised functions of worry, cognitive avoidance of threat and inhibition of emotional processing.

Cognitive Avoidance of Threat

Borkovec (1994) suggests that chronic worriers are frequently afraid of the consequences of events that may occur in the future. However as these are often only potential consequences, there is little action they can take to prevent them. Most of the threat they anticipate is a product of their own cognitive appraisals. Therefore, as there is 'no place to run, no place to hide, and nothing to fight' (Borkovec, 1994; p.16) they resort to cognitive activity in an attempt to deal with the anticipated threat, i.e. worrying. Borkovec (1994) reports that GAD clients believe this works on several levels. Firstly, it helps in the actual avoidance of catastrophe, by generating solutions to the worried-about problem. Whether this is actually true is as yet unclear, but if the client believes it to be true and the anticipated event does not occur, this is likely to help maintain the use of worry. Clients also report that worrying about an event can make it less likely to occur, i.e. they have a superstitious belief in the effectiveness of worry. Again if an individual worries about something which does not occur, their belief that it was the act of worrying which prevented it is likely to be reinforced and their use of worry maintained. Borkovec (1994) also

states that worry is seen to help avoid threat by preparing the individual for the event, so that its emotional consequences are not as aversive as feared. In addition, some GAD clients report that worrying helps them to avoid catastrophes by actually motivating them to do something to prevent them. Finally, some people report that worry helps them to avoid the threat from more emotionally distressing topics, a theory supported by Borkovec & Roemer (1995). They found that this was a belief that reliably discriminated participants with GAD from controls. This leads on to the second hypothesised function of worry.

Inhibition of Emotional Processing

Borkovec & Inz (1990) compared the reported frequencies of thoughts and images in GAD and non-anxious participants. They demonstrated that during relaxation chronic worriers reported equal amounts of thoughts and images, whereas the control group reported mostly images. In addition, when they were instructed to worry, both groups reported an increased proportion of thoughts. Finally, after treatment for their GAD, the clinical group reported an increased proportion of imagery during relaxation. This would appear to indicate that worry is primarily verbal in content. It has also been shown that verbal articulation of emotional material has far less physiological effect than imagery involving the same material (Vrana, Cuthbert & Lang, 1986). Therefore Borkovec & Newman (in press) argue that worry functions to avoid aversive images and the associated somatic anxiety symptoms. By worrying about secondary concerns, the underlying unpleasant emotions can be avoided. Unfortunately this leads to reinforcement of the worry, and incomplete emotional processing of the material avoided. This is still a relatively new hypothesis, but seems a promising area for future research.

1.3 Criticisms of the Study of Worry

As with almost any field of research, worry has its opponents. The main criticisms levelled at worry research are that it does not add anything new to the study of anxiety, is not separate from anxiety and so does not need treatments specifically aimed at alleviating it. This argument comes particularly from those of the behaviourist tradition. O'Neill (1985, 1985b) questions the validity of the hypothesised problem-solving element of worry, stating that as the outcome of events causing the worry is probably uncertain, people do not try to generate alternatives but are merely anxious about a possible negative outcome they can do nothing to control. However this would appear to be restricting problem-solving to a very narrow definition. To borrow O'Neill's (1985) illustration of worrying while waiting for exam results, although you cannot do anything to change those results, you can examine all the potential consequences which might occur as a result of those results. That is, although you cannot 'solve the problem' of failing the exam, you can attempt to solve the problem of what you are going to do about it. O'Neill (1985), also argues that as a degree of worry has been shown to be related to past events, (e.g. Borkovec et al, 1983), this makes the problem-solving component irrelevant. Again however this criticism can be countered by taking a slightly different view of problem-solving. While agreeing that it is very difficult to 'solve' the events of the past, this does not prevent the individual from trying to resolve the consequences of the past, whether these are practical or emotional.

O'Neill (1985) states that worry is merely the cognitive component of anxiety and therefore does not need its own treatment as an effective one for anxiety already exists. However this would appear to have a somewhat excessive degree of confidence in psychological treatments. Not all anxious people can be helped by standard anxiety management techniques, and surely anything which could potentially improve the efficacy of treatment is worthy of consideration. Even if worry is conceptualised as 'only' the cognitive component of anxiety, it would still appear a worthwhile endeavour to develop an effective technique for reducing this component, even as part of a more general treatment programme for anxiety.

Zebb & Beck (1998) attempted to answer the question of whether there was in fact any difference between anxiety and worry by administering both worry scales and measures of anxiety to 189 university students. Participants completed three worry measures and four anxiety measures. They found that the worry measures correlated quite highly with each other, as did the anxiety measures. They also found significant relationships between the worry and anxiety scales. Problem-solving did differentiate between the two groups however, being more closely related to worry than to anxiety. This lends support to Borkovec et al's (1983) hypothesis that attempted problem-solving is an important feature of worry.

One of the measures Zebb & Beck (1998) administered was the Cognitive-Somatic Anxiety Questionnaire, which has two subscales assessing the cognitive and the somatic domains of anxiety separately. When they analysed their data in terms of the subscales, they found more distinctions between worry and anxiety. Negative affect, sense of personal control and problem solving were all more characteristic of worry than of somatic anxiety. Zebb & Beck (1998) conclude that worry and anxiety seem to be very similar when assessed by most instruments, but when a purer measure of somatic anxiety is used the above differences become apparent. However it could be argued that this study does not support the idea of worry as construct separate from anxiety. It does appear to show a difference between worry and *somatic* anxiety, but if worry and somatic anxiety are components of *general* anxiety then this would be expected. Therefore this study would seem to support the existence of worry as an important part of anxiety, separate from more physical elements, but not that it is an entity in its own right. Nevertheless this is not to negate the relevance of worry as field for future research. As a component of anxiety, worry would appear to have an important role in its development and maintenance, making the understanding of it essential in developing effective forms of treatment.

1.4 Meta-Worry

A relatively new addition to the worry literature has been provided by Wells (1995, 1997) with his concept of meta-worry. He proposed meta-worry, or 'worry about worry' as the key way in which normal worry differed from pathological worry. Craske et al (1989) had previously investigated the differences between worry in GAD patients and nonanxious controls. As already mentioned, they asked participants about the content of their worries, and found that while GAD patients did worry *more* about illness, health and injury issues than the control group, they did not worry about categorically *different* things. The main features which differentiated the two groups were that the GAD group found their worries harder to control and rated themselves as being less successful at alleviating them than did the control group. GAD participants were also more likely to report worrying without a specific precipitant.

This led Wells (1995, 1997) to hypothesise that if worry is characterised by intrusive cognitions, but it is not their content that differentiates normal from pathological worry, then it could be their appraisal that is of importance. He stated that two types of appraisal are likely to be involved:

1. Appraisal of external events and non-cognitive internal stimuli
2. Appraisal of cognitions i.e. meta-cognition

According to Wells, peoples' meta-cognitive beliefs are likely to be of significance in the development of pathological worry. Meta-cognitive beliefs are the beliefs people hold both about the general characteristics of their thinking system (e.g. I have a good memory; My worries are uncontrollable) and about the advantages and disadvantages of types of thinking (e.g. Worrying helps me to solve problems; Worrying is bad for me). These beliefs obviously affect the individual's attitudes towards their thoughts, and encourages them to attempt to either do more or less of a particular type of thinking. For example, if you believe that your worrying help you to see things more clearly, you are less likely to be motivated to reduce your worrying.

It would appear that people can have both positive beliefs (e.g. Worrying helps me to get things done) and negative beliefs (e.g. Worrying could make me go mad) about their worrying. It is important to note that positive beliefs about worry are not necessarily beneficial to the individual. Cartwright-Hatton & Wells (1997) devised a questionnaire to assess people's beliefs about their worry (the Meta-Cognitions Questionnaire) and found both positive and negative meta-beliefs were correlated with worry proneness and trait anxiety. In fact, Wells (1994b,1995) hypothesised that both positive and negative beliefs about worry played a role in the transition from normal to pathological worry. For example, if an individual believes that by worrying about a feared event they are making it less likely to occur (a positive belief about worry), they could become more and more preoccupied by monitoring that they are continually worrying about the event. This in turn could lead to anxiety when they realise they are not worrying, increasing focus on the potential negative consequences of not worrying and reduced ability to concentrate on other tasks.

Wells (1995, 1997) differentiates between Type 1 and Type 2 worries in his model of the development of pathological worry. Type 1 worries are conceptualised as general worries concerned with life events, and Type 2 worries as worries about cognition, or meta-worries. According to Wells' theory, normal worry has little or no Type 2 worry, whereas pathological worry has both Type 1 and Type 2. He suggests five mechanisms that could be involved in the development of pathological from normal worry.

1. Meta-worry is likely to extend the duration of a normal worry episode, leading to the maintenance of associated negative affect and cognitive disruption.
2. Type 2 worry may prevent Type 1 worries from being completely emotionally processed, as both types of worry are likely to be in competition for common processing resources.
3. Type 2 worries are likely to increase sensitivity to worry, by priming the processing system to detect any worrying cognitions.

4. Type 2 worries (such as 'If I don't control my thoughts I can't function') can lead to increased thought control attempts, which are frequently counter-productive.
5. Type 2 worrying can prolong the activation of dysfunctional meta-beliefs, which may influence the processing of other types of thought.

Meta-worry is still a relatively new concept, and as such has had few studies directed towards it. Wells (1994) developed the Anxious Thoughts Inventory, a questionnaire measuring both Type 1 (social and health) worries and Type 2 (meta) worries. He constructed this after interviewing a group of clinically anxious patients (n = 34) about their worries. After piloting and revisions it was administered to a far larger group of undergraduate students (n = 110). He found that meta-worry did indeed emerge as a separate factor from the purely content subscales of health and social worry.

As mentioned, the study by Cartwright-Hatton & Wells (1997) also looked at the development of a questionnaire to assess meta-beliefs. This identified five dimensions of meta-cognition.

1. *Positive beliefs about worry* – this includes beliefs about worrying aiding problem-solving, helping to avoid aversive situations and being part of a normal person.
2. *Negative beliefs about the controllability of thoughts and corresponding danger* – this dimension relates to beliefs about the necessity of controlling thoughts, the dangers of worrying and how possible it is to control worry.
3. *Cognitive confidence* – this is concerned with beliefs about the efficiency of cognitive functions, especially memory and attention.
4. *Negative beliefs about thoughts in general (including themes of superstition, punishment and responsibility)* – this factor relates to beliefs about negative events being caused by thoughts, and having responsibility for these.
5. *Cognitive self-consciousness* – this dimension involves the degree to which the individual focuses on their own thinking.

Wells' theory, while as yet requiring further empirical validation, has important clinical implications. If, as he proposes, it is an individual's meta-beliefs that are paramount in the development and maintenance of meta-worry, then treatment must be focused at this level. That is, in order for people to benefit from cognitive treatment for pathological worry, or GAD, their meta-beliefs must be elucidated and modified. It would seem essential that further research is carried out on the concept of meta-worry, particularly with relevance to other clinical populations, including older adults.

1.5 Anxiety and Worry in Older Adults

1.5.1 Anxiety in older adults

Until relatively recently, the literature on anxiety disorders in older adults was extremely sparse. However in the 1980's several epidemiological studies began to suggest that anxiety was in fact a problem for a significant number of people in later life (e.g. Weissman, Myers, Tischler, Holzer, Leaf, Orvaschel & Brody, 1985; Copeland, Dewey, Wood, Searle, Davidson & McWilliam, 1987; Lindesay, Briggs & Murphy, 1989). Although these studies suggest that anxiety disorders are reported somewhat less frequently in older than younger samples, they still found fairly high rates. For example, Reiger, Boyd, Burke, Rae, Myers, Kramer, Rorins, George, Karno & Locke (1988) found the one-month prevalence of anxiety disorders in the US was 12% for women aged between 25 and 44, and 7% for women over 65 years of age. In their study of an urban elderly community in London, Lindesay et al (1989) found overall prevalence rates of 3.7% for generalised anxiety and 10.0% for phobic disorders. In addition, Reiger et al (1988) also reported that anxiety was 4-7 times more prevalent in older adults than depression.

It is also important to consider the possibility the there is a high degree of undiagnosed and unreported anxiety amongst elderly populations. It has been frequently shown that over 65's are the largest users of anxiolytic and tranquillising medication (Salzman, 1991), and yet the reported prevalence for anxiety is less than for under 65's (Weissman et al, 1985). This could in part be due to the difficulty of differential diagnosis in older adults. Anxiety can present with a symptom pattern similar to many physical conditions common to older adults, such as hypoglycaemia, small ischemic attack and pulmonary embolism, leading to medical rather than psychiatric or psychological diagnosis and management (Hersen & Van Hasselt, 1992). In addition there is of course the possibility of co-morbidity, with the presence of a physical condition masking an anxiety disorder. It has recently been demonstrated that older adults consulting their GP with an anxiety disorder are unlikely to be referred to specific clinical psychology or psychiatry services, instead being managed by their GP with medication (de Beurs, Beekman, van Balkom,

Deeg, van Dyck & van Tilburg, 1999). To complicate matters further, older adults have been shown to be less likely to consult their GP regarding psychological problems (Copeland et al, 1987) leading to underreporting, as well as many people not receiving treatment which could potentially benefit them.

Very little research has considered the pattern of anxiety disorders in older adults, and how they vary from younger samples. One recent study that attempted to do this was by Beck, Stanley and Zebb (1996). They compared 44 people with Generalised Anxiety Disorder who were over 55 years of age, with a sample matched for age, gender and ethnicity but without psychiatric disorders. Both samples were recruited from community agencies and media announcements, and the control group were paid for taking part. They found that the GAD group scored significantly higher on measures of anxiety (the Spielberger State-Trait Anxiety Inventory and the Hamilton Anxiety Rating Scale), worry (the Penn State Worry Questionnaire), depression (the Beck Depression Inventory and the Hamilton Rating Scale for Depression) and social fears (the social subscales of the Worry Questionnaire and the Fear Questionnaire). Their ratings on these measures were similar to those found in younger adults with GAD in previous studies, suggesting some degree of concordance between older and younger people with GAD. However Beck et al (1996) do suggest that further study should be directed at whether or not this apparent similarity extends to the features of GAD, such as the content of worry, perceptions of the uncontrollability of worry and specific symptomatology. The authors also noted that their control group exhibited low levels of worry, anxiety and depression, suggesting that these phenomena should not be regarded as an inevitable concomitant of ageing.

1.5.2 Worry in Older Adults

As already described in Section 1.1., worry is central to GAD, and is involved in most forms of anxiety disorder. Although phenomenological research into aspects of worry has expanded considerably in recent years, most of this research focuses on young to middle-aged adults. Wisocki's group in the late 1980's (e.g. Wisocki, 1986; Wisocki Handen & Morse, 1986) were the first to consider whether any of the

features of worry differed across the lifespan. There would seem to be several reasons for hypothesising that older adults may be particularly susceptible to worry as a component of anxiety. To begin with, worry is seen as a 'pervasive human activity' (Borkovec, 1994; p.5), and there would appear to be no theoretical reason why this should not apply to humans of all ages. Secondly, it has been argued that older people in general may have more things to worry about than younger people do. For example, Wisocki (1994) suggests that physical decline, loss of significant others and financial concerns are all common experiences for the elderly. Thirdly, worry has been shown to occur most frequently when there is low environmental demand and the individual is inactive (Borkovec, 1994), conditions which are often thought to apply to retired people. Fourthly, worry has been shown to maintain and exacerbate several physical health problems which are common in older people, such as coronary heart disease, hypertension and hypoglycaemia (Cooper, 1998). Finally, worry is involved in several psychological conditions found fairly frequently in older adults, such as anxiety, depression and some cases of insomnia (Borkovec, Wilkinson, Folensbee & Lerman, 1983). When these points are added to the general impression of clinicians working with anxious people in this age group that worry is a significant problem, it would seem to be an appropriate field for investigation.

Wisocki, Handen & Morse (1986) were probably the first to address this issue, pointing out the deficiencies in existing measures of worry when administered to an older population. They claimed that most anxiety measures were difficult for older adults to complete, and did not correspond to the concerns of older people. Therefore they devised The Worry Scale, a self-report measure designed to assess worry in three domains identified as worrisome to older adults in a pilot study: finances, health and social concerns. Wisocki et al (1986) found that the most frequently reported concerns were health-related, and that these were significantly correlated with increased age (Wisocki, 1988). Costa & McCrae (1980) in fact suggest that regardless of their actual physical health status, people's expectations of their health decline with age. This would lead to the hypothesis that even healthy older adults would be concerned about their physical condition. However Gillanders, Buss, Gemmel & Pomidor (1992) did not find this to be the case. They interviewed

988 noninstitutionalised adults above the age of 61 about their subjective physical health and their worries associated with this. They found very few of their sample without a physical health problem worried about their health excessively.

Wisocki et al (1986) administered the Worry Scale to non-clinical samples of American housebound and community based older adults, who in general reported very few worries. Those worries that were expressed were seen as reasonable by the authors. In addition to health as mentioned above, another common concern was of being the victim of crime, described by Wisocki et al as a 'legitimate worry'. However according to Giles-Sims (1984), while fear of crime is certainly common amongst older adults, its legitimacy is more questionable. He cites US Department of Justice figures indicating relatively low levels of victimisation in older adults. This is also true in this country, with people over 65 being less likely than any other age group to be a victim of both household and personal crime (Scottish Crime Survey, 1993). Therefore it would appear that worry about victimisation in older adults is not as rational as Wisocki et al (1986) suggest.

Another difficulty with Wisocki et al's (1986) study is that as the Worry Scale was designed for older adults, it only assesses age specific worries. It seems unlikely that all the things older adults worry about are directly related to their chronological age. Also, the sample chosen by Wisocki et al (1986) was relatively well off financially, and included a high number of white-collar workers. It is therefore unclear how well these results would generalise to a more materially deprived, less well-educated population, or one that was culturally different.

In a subsequent study Wisocki (1988) examined the differences between older worriers and non-worriers using the Worry Scale. The sample of 94 healthy, active participants ranged from 60 to 90 years old, and again reported few worries on this measure. However those who did worry more also rated themselves as in poorer health, being less vigorous and having more chronic illness than those whom reported fewer worries. The worried group matched the non-worried group in terms of both age and income. Unfortunately it is not clear how Wisocki (1988)

differentiated between the high and low worriers. Wisocki (1988) does point out that the conclusions that can be drawn from this study are restricted by the nature of her sample. Her participants were in the main healthy, active and financially secure, so could be argued to have less to worry about than the older adult population as a whole. Wisocki (1988) suggests that further studies could be carried out on different populations of older adults, including both the economically disadvantaged and the clinically depressed and anxious. In addition the questionnaires in this study were administered to participants in groups, increasing the possibility of a response bias.

To begin to address the question of cultural specificity, Skarborn & Nicki (1996) looked at worry in Canadian older adults. They used similar samples to Wisocki et al (1986), comparing non-clinical mobile and housebound adults over the age of 65 with a variety of measures including the Worry Scale. Skarborn & Nicki (1996) also found that most of their participants' worries were health-related, and that in general they had few worries as measured by The Worry Scale. However they did point out that they found a large standard deviation for worry scores, indicating substantial individual differences. They also found worry to be associated with higher levels of anxiety, depression and obsessive-compulsive behaviour, and with lower scores of subjective health. The authors suggest that 'therefore worry appears to have a negative effect on both physical and mental health' (Skarborn & Nicki, 1996; p.177). Of course it is equally possible that the reverse could be true, with poor mental and physical health leading to increased worry. In general however, both Wisocki et al's (1986) American and Skarborn & Nicki's (1996) Canadian samples were very similar in their patterns of worry.

Unfortunately, most of the research groups working on worry in older adults are based in the US. Although Skarborn & Nicki's (1996) findings suggest that Wisocki's findings are replicable in Canada, this does not automatically imply that it would be the case for the UK. It is important to bear in mind the previously mentioned bias in Wisocki's sample group. Although Wisocki (1986) found that scores on the Worry Scale were not differentiated by socio-economic status within her sample, this may not be true of a comparison between different samples. There

are also major differences between healthcare services in the US and the UK. It would seem likely that differences in how health problems are dealt with would affect the nature and perhaps degree of health worries. Given that both Wisocki et al (1986) and Skarborn & Nicki (1996) found health-related worries to be the most common concern among older adults, this is likely to be of particular relevance to this age group.

A recent study investigating worry in older adults carried out in Britain is that of Cooper (1998). Cooper attempted to evaluate the Anxious Thoughts Inventory (AnTI), a measure of worry validated for people between 17 and 54 years of age, on a sample of people over the age of 65. 110 participants over 65 years old were given the AnTI, Speilberger's State-Trait Anxiety Inventory, the Thought Control Questionnaire and the Generalised Anxiety Disorder Questionnaire. The original AnTI research found three factors – social worry, health worry and meta-worry. Social worry and health worry are related to the *content* of worry, and meta-worry is concerned with the *process* of worry. However, Cooper found a slightly different pattern with her sample of older adults. Their responses clustered into social, health and 'death and appearance' factors. In addition, all three factors had both content and process attributes, indicating that meta-worry was embedded in the other factors. It has been suggested that meta-worry is an important factor in differentiating normal from pathological worry (e.g. Wells, 1994, 1995). Therefore the pervasiveness of meta-worry in this sample of older adults could indicate that while most older adults do not worry excessively, those who do, experience it as more uncontrollable and intrusive than do younger adults.

1.5.3 Differences in the Worrying of Older and Younger Adults

Only one study has made a direct comparison of worry between younger and older adults. Powers, Wisocki & Whitbourne (1992) compared 89 older adults aged between 63 and 92 years recruited from drop-in centres with 74 university students between 18 and 24 years of age. As well as assessing relative levels of worry, they also looked at three correlates of worry that they felt might contribute to any

differences between the groups. The first of these was time perspective. It has been suggested that worrying is primarily future-oriented (e.g. Borkovec, 1984). Powers et al (1992) hypothesised that as an individual ages they become less focused on the future, and may therefore find less to worry about. Uncontrollability is also considered a central component of worry (e.g. Borkovec, 1984). Although the research on age differences in locus of control is inconclusive, Powers et al (1992) hypothesised that this may also be involved in age differences in worry. Finally, they looked at the role of general psychological well being in worry in the two age groups.

The two groups completed the Worry Scale, measures of time perspective, the Affect Balance Scale and the Locus of Control Scale. The results showed that older adults worried less than younger adults as measured by the financial and social worries subscales of the Worry Scale, and the same amount as younger adults on the health worries subscale. Time perspective was not correlated with worry for either group, and for both groups worry was positively correlated with an external locus of control and negatively correlated with Affect Balance Scale scores. In general, younger adults who worried, worried about the present, and older adults who worried, worried about the future. This does not support Powers et al's (1992) original hypothesis that older adults would be less future oriented that their younger counterparts.

In this study the lower level of worrying reported by older adults does support Wisocki's earlier findings (e.g. Wisocki et al, 1986; Wisocki, 1988), and leads Powers et al (1992) to state that this 'provide(s) a positive and affirming picture of life at the top of the developmental ladder, reflecting a sense of security and confidence about old age that is gratifying' (Powers et al, 1992; p.85). Nevertheless, without being excessively pessimistic, there are several problems with this study and its positive conclusion. Firstly, as Powers et al (1992) point out, there is the possibility of a response bias as all the questionnaires were administered in a group setting. Participants may well have responded more positively than they would if the questionnaires were given individually. In addition both groups were given incentives to take part in the study, the older adults receiving a small payment and

the younger adults a credit towards their college course grades. Although obviously making it easier to recruit the required sample, this could well influence its characteristics. It is also questionable whether college students are the most appropriate group with which to compare older adults. Although easy to recruit, it is important to remember that students are not representative of the population as a whole, and are not even representative of their own age group. The finding that they worried more about finances and social relationships than older adults may be as much a feature of being a student as of being younger. Finally, no mention is made of the severity of worry in those who did worry. Therefore it is unclear whether Cooper's (1998) suggestion that where worry does exist in older adults it can be a substantial problem is supported or not.

1.6 Coping With Worry

Powers et al (1992) conclude that 'it would appear that most older individuals are able to ... refocus their coping efforts in a positive direction' (Powers et al, 1992; p.86). The ways in which people cope with their worrying has understandably been the subject of research, as building on strategies people already utilise effectively would seem to be a good way of developing treatment interventions. In general, coping can be seen as behaviour aimed at relieving emotional distress, problem solving or a combination of both (McCrae, 1982). Various theorists have categorised the coping strategies which people use into different dimensions. For example, Billings & Moos (1981) group coping into active-cognitive methods, active-behavioural methods, and avoidance. Active cognitive coping involves trying to change the appraisal of the situation (e.g. 'I try to see the positive side'; 'I think about different ways of handling the problem'). Active-behavioural coping methods are behavioural attempts directed at changing the problem or its effects (e.g. 'I talk to my wife about the situation'; 'I do more exercise'). Avoidance, as its name implies, involves avoiding facing the problem or its emotional consequences (e.g. 'I keep my feelings to myself'; 'I try to feel better by eating more').

Lazarus & DeLongis (1983) differentiate between problem-focused and emotion-focused coping. Problem-focused coping attempts to change the external situation, whereas emotion-focused coping attempts to change the appraisal of the situation and so the emotional reaction to it. Therefore successful problem-focused coping may result in the resolution of the worry-provoking situation, whereas emotion-focused coping may not change the actual situation but may reduce the unpleasant emotions it causes. Folkman & Lazarus (1980) found no age effects associated with either emotion-focused or problem-focused coping, but their sample did not include anyone over the age of 64.

McCrae (1982) cites two diametrically opposed theories as to how the distribution of these strategies changes with age, the regression hypothesis and the growth hypothesis. The regression hypothesis suggests that older adults find it hard to adapt

and tend to use less effective ways of coping such as somatisation and denial. The growth hypothesis suggests the opposite of this, that as people age their ways of coping become more mature, more effective and less distorting of reality. However studies have failed to show either of these effects consistently. In addition, researchers have rarely included people over 65 in their samples, so age associated changes have only been studied as far as middle age.

Folkman & Lazarus (1980) make the important point that 'as the sources of stress begin to change with advancing age, differences in coping might emerge as a function of changes in sources of stress' (Folkman & Lazarus, 1980; p.233). As people age, the type of stressful events they experience also change. Older adults have far more 'exit' events to deal with, such as retirement and bereavement, compared with the 'entrance' events of younger adults. Therefore it may be the case that any study attempting to look at differences in coping associated with age would need to control for the type of stress experienced. McCrae (1982) attempted to do this by looking at coping mechanisms in older and younger adults for simlar strassful situations. He found that in general older adults cope in similar ways to younger adults, and when they do use different strategies it tends to be related to facing different types of stress. McCrae (1982) makes the caveat that as his research was cross-sectional rather than longitudinal, this may be a cohort effect. He also notes that his sample was in good physical, mental and financial shape, and that a less advantaged sample might yield different effects. In addition, Lazarus & DeLongis (1983) make the important point that the objective nature of an event is not enough to predict stress and coping but rather that the individual's appraisal of the event is crucial. Nonetheless, McCrae's work seems to suggest that of itself, age does not have a negative effect on coping strategies.

A study looking more specifically at how older adults cope with worry is that of Cappaliez (1988). This looked at the strategies which older adults use in an attempt to cope with daily worries. The sample of 50 older adults were recruited from social clubs and nursing homes, and given the Worry Scale, Spielberger's State-Trait Anxiety Inventory and the Ways of Coping checklist. Consistent with Wisocki's work (e.g. Wisocki, 1994) participants reported mild levels of worry, with health

worries being the most frequent. Distancing and positive reappraisal were the most commonly used coping strategies, with escape-avoidance and confrontive coping the least used. Positive reappraisal (the creation of positive meaning) and distancing (the adoption of a detached attitude) are both emotion-focused rather than problem-focused strategies. Given that there is a limit to what individuals can actually do about physical health problems, it could be argued that it is more adaptive to use emotion-focused coping strategies to deal with health worries.

Cappaliez (1988) also found that older adults who lived in the community used the coping strategy of self-controlling (attempting to 'regulate feelings and action by delaying action and keeping feelings to oneself'; Cappaliez, 1988; p.71) more often than those in nursing homes. This strategy was positively associated with anxiety. Cappaliez (1988) suggests that this could be related to the emphasis our society places on independence and self-reliance, so self-control can boost an individual's self-esteem while interfering with anxiety management. Another finding Cappaliez notes is that older adults very rarely sought social support as a way of coping with their daily worries. This has implications for treatment, as older adults may be unwilling to ask for help with anxiety problems, and may well be somewhat ambivalent about receiving help even when they do present for treatment. It would appear to be important to strike a balance between improving anxiety regulation and maintaining self-esteem received from the perception of independent self-control.

A more recent study by Tapanya, Nicki & Jarusawad (1997) looked at one particular way of coping with worry in older adults. They state that it has been reported anecdotally that older adults often use religion and religious behaviours to help themselves cope with worry. Their sample consisted of 52 Thai Buddhist and 52 Canadian Christian people over 65 years of age, who were given the Penn State Worry Questionnaire (PSWQ) and the Age Universal Intrinsic-Extrinsic Scale (AUI-ES). As previously stated, the PSWQ is a measure of the nature and frequency of worry rather than its content. The AUI-ES measures the degree of intrinsic and extrinsic religious beliefs. People with an extrinsic orientation to religion find religion useful, and hold their beliefs because it helps them, perhaps in terms of

security or status. Individuals who have an intrinsic orientation to their religion have internalised its values, and find their primary purpose in following it. Tapanya et al (1997) found that for both Buddhists and Christians a more intrinsic orientation towards religion was associated with lower levels of worry. Unfortunately it is not possible to tell whether intrinsic religious orientation leads to less worry, or whether people who tend to worry less anyway select a more intrinsic orientation to religion.

What this study does not investigate is whether holding religious beliefs of any kind results in differing levels of worry from people who hold no religious beliefs. It would also perhaps be interesting to investigate whether older adults find turning to religious behaviours a helpful strategy in coping with their worries.

1.7 Aims

From the literature review above it can clearly be seen that several important areas relating to worry and older adults have yet to be investigated. For example, few studies have been done using representative clinical samples of older adults, and even less have directly compared worrying in younger and older adults. Wells' (1995, 1997) theory of meta-worry and its role in the maintenance and severity of pathological worry is only beginning to be considered in relation to older adults (Cooper, 1998). Almost all of the work on worrying in older people to date has been carried out in the United States and Canada. This paucity of research provided the impetus for the current study. It used samples of people over and under 65 years of age living in central Scotland who were being treated for an anxiety disorder in an attempt to investigate the following questions:

1. Do younger and older anxious adults worry about different things?
2. Is meta-worry a feature of the pathological worry of older as well as younger anxious adults?
3. Do younger and older anxious adults use different strategies to cope with their worry?

In summary, this study aims to examine potential differences in worrying between clinical samples of younger and older adults, using both quantitative and qualitative measures. The three main areas which will be investigated are the content of worry, meta-beliefs about worry and strategies for coping with worry.

1.8 Hypotheses

The hypotheses investigated by this study are as follows:

1. **Content of worry**

   There will be differences in the content of worry between younger and older anxious adults. Specifically, older adults will worry less about social-evaluative concerns than younger adults. However, younger and older adults will not differ in the degree to which they worry about their health.

2. **Meta-beliefs about worry**

   Meta-worry will be a feature of the worry of both younger and older adults. Older adults will believe their worry to be more uncontrollable than will younger adults.

3. **Strategies for coping with worry**

   Older and younger adults will use similar coping strategies for dealing with their worry. However, older adults will use positive appraisal more often than younger adults. Younger adults will use social support more than older adults.

The following section outlines the methodology by which the above aims and hypotheses were addressed.

2. Methodology

2.1. Design

An independent subjects cross-sectional design was used to compare a sample of anxious adults over 65 with a similar sample aged under 65 on a number of measures: the Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983), the Penn State Worry Questionnaire (PSWQ) (Meyer, Miller, Metzger & Borkovec, 1990), the Anxious Thoughts Inventory (AnTI) (Wells, 1994) and the Meta-Cognitions Questionnaire (MCQ) (Cartwright-Hatton & Wells, 1997). In addition all participants were given a semi-structured interview relating to the strategies that they used to control their worry.

To be suitable for inclusion clients had to:

- be currently receiving psychological or psychiatric treatment for an anxiety disorder, which was their primary diagnosis
- score 8 or more on the anxiety subscale of the HADS
- score 48 or more on the PSWQ
- have sufficient knowledge of English to give informed consent and complete the experimental tasks
- have the cognitive ability to give informed consent and understand the experimental tasks

Participants were excluded if they:

- had a score on the depression subscale of the HADS in the same diagnostic category or higher than their score on the anxiety subscale of the same measure
- had a history of alcohol or substance abuse
- exhibited uncontrolled psychotic symptoms
- had physical difficulties which would have prevented them from completing the experimental tasks
- had evidence of any organic pathology

The above inclusion and exclusion criteria were determined to ensure that participants fitted the research protocol. It was originally intended to administer the HADS and the PSWQ as a screening procedure. Participants would be included if they were identified as a 'worrier' by a score of 48 or above on the PSWQ, and as anxious by a score of 8 or above on the anxiety subscale of the HADS. In addition, given the high concordance of anxiety and depression, while participants would not be excluded on the basis of some depressive symptomatology, they would have to have a more significant anxiety than depression rating on the HADS. However for ethical reasons the design was modified so that all participants completed all the questionnaires. The data of those participants who did not meet the above criteria were then intended to be excluded from the final analysis. However, as participants were identified as potentially suitable for inclusion in this study by their therapists, all the participants approached by the researcher met the above criteria. It was not therefore necessary to exclude any data sets.

2.2. Measures

Hospital Anxiety and Depression Scale (HADS)(Zigmond & Snaith, 1983)

This is a 14-item self-administered questionnaire that screens for and distinguishes between anxiety and depression, and measures their severity. This is a well-established questionnaire which has been shown to be reliable for use with an older adult population (e.g. Flint & Rifat, 1996; Spinhoven, Ormel, Sloekers, Kempen, Speckens & Hemert, 1997).

Penn State Worry Questionnaire (PSWQ)(Meyer et al, 1990)

A 16-item self-report questionnaire which measures the trait of worry, irrespective of the actual content of worry. Participants rate how typical of themselves a list of statements about worry are on a 5-point scale, from 'not at all typical' to 'very typical'. Items include: 'My worries overwhelm me'; 'I never worry about anything'; 'Once I start worrying I can't stop'. The PSWQ has been shown to distinguish worry from other psychological symptoms (Brown, Antony & Barlow, 1992). Its psychometric properties remain appropriate when used with older adults (Beck, Stanley & Zebb, 1995).

Anxious Thoughts Inventory (AnTI)(Wells, 1994)

A 22-item self-report measure of multiple dimensions of generalised worry, the AnTI measures three factors: social worry, health worry and meta-worry. Participants are asked to rate how often they worry about the items on a 4-point scale from 'almost never' to 'almost always'. Items assessing each factor include: Social worry – 'I worry about saying or doing the wrong things when among strangers', 'I get embarrassed easily'; Health worry – 'I worry about having a heart attack or cancer', 'I worry about death'; Meta-worry – 'I have difficulty clearing my mind of repetitive thoughts', 'I think I am missing out on things in life because I worry too much'. As discussed earlier, it has been suggested that the factor structure of this questionnaire varies when it is administered to older adults (Cooper, 1998).

Meta-Cognitions Questionnaire (MCQ)(Cartwright-Hatton & Wells, 1997)

This is a 65-item self-report questionnaire that measures beliefs about worry and intrusive thoughts, with five factors. Respondents rate the degree to which they agree with the questionnaire items on a 4-point scale from 'do not agree' to 'agree very much'.

The factors are as follows, with examples of items relating to each dimension given in parentheses: positive beliefs about worry ('worrying helps me to avoid problems in the future', 'worrying is a sign of a good person'); negative beliefs about the controllability of thoughts and corresponding danger ('I could make myself sick with worrying', 'my worrying thoughts are uncontrollable'); cognitive confidence ('I have a poor memory', 'I am easily distracted'); negative beliefs about thoughts in general, including themes of superstition, punishment and responsibility ('I should be in control of my thoughts all the time', 'If I do not stop my worrying thoughts they could come true'); cognitive self-consciousness ('I think a lot about my thoughts', 'I pay close attention to the way my mind works').

As the authors themselves point out, there is probably some overlap between the factors, and it is as yet unclear whether all the items in the questionnaire are strictly necessary. To date the psychometric properties of the MCQ have not been investigated with regards to older adults.

The use of the PSWQ and the HADS as screening measures has already been discussed. The AnTI was used as a quantitative measure of the content of worry. It was selected over The Worry Scale as it includes items that are likely to be of relevance for both younger and older people. The MCQ was included in order to investigate Wells' hypothesis regarding the importance of meta-worry in the maintenance of pathological worry, particularly with regard to older adults. The above questionnaires were administered orally, as this both aided the comprehension and reduced the anxiety of the older group in particular. Obviously this had some methodological drawbacks, which are discussed further in Section 4.1.

Participants were also interviewed about the content of their worry, and how they attempted to deal with it. The interview was semi-structured, and included basic demographic information such as date of birth and marital status. Participants were then asked to rate how much they thought they worried on a five-point scale, and what they worried about. If they had difficulty in specifying their worries, they were prompted by a list of options generated from the Worry Domains Questionnaire (Tallis, Eysenck & Mathews, 1992). They were then asked how their worrying affected them, and whether they worried about how much they worried, a basic measure of meta-worry. Participants were also asked about what they did to cope with their worry. Again, if they were unable to generate a response they were prompted by a list of coping strategies taken from those suggested by Billings & Moos (1981). Participants then selected the strategy they used most frequently and the one they found most effective. Finally, participants were asked to think of any disadvantages of any of the coping strategies they used.

Copies of all questionnaires and the interview schedule are included in the appendices.

2.3. Participants

2.3.1 Recruitment

65 years of age was taken as the cut-off point for the younger and older groups, as this is the age used to determine whether clients attend the adult or older adult clinical psychology services. Participants were recruited from a variety of sources. The younger group consisted of a selection of the clients attending the adult clinical psychology departments in Forth Valley Primary Care NHS Trust. A summary of the study and the inclusion and exclusion criteria outlined in 2.1 above were circulated to all the clinical psychologists working in the adult departments. The psychologists were asked to mention the study to any of their clients who they believed would be suitable for the study, give them an information leaflet and obtain their permission for the researcher to contact them. If this was given, the researcher then contacted the client by telephone to discuss the study in more detail, answer any questions the client might have and ask them if they would be prepared to take part in the study.

A similar recruitment procedure was followed for the older participants. However, as there is no clinical psychology service for older adults in the geographical area in which this study was conducted, it could not be replicated exactly. Therefore this group was recruited from both clients attending psychiatric day hospitals in Forth Valley Primary Care NHS Trust and clients attending the clinical psychology service for older adults in Lothian University Hospitals NHS Trust. Clients from both these sources were then identified and recruited in the same way as for the younger group.

For both the younger and older groups, once they had consented to take part in the study they were either visited at home or their day hospital, or at the time of their next routine psychology appointment. They then completed the measures detailed above.

2.3.2 Sample size

Power analysis was used to determine the sample size. Significance was set at the 0.05 level, the effect size was predicted to be large and the statistical power was set at 0.8, as recommended by Cohen (1988). A sample size of 52, 26 in each group, was calculated.

Unfortunately time considerations made it impossible to obtain a sample of this size. A total of 40 participants, 20 in the older group and 20 in the younger, completed the experimental tasks. This obviously weakens the strength of the results obtained, and must be borne in mind when interpreting them. This will be discussed further in section 4.1.

2.4. Analysis of data

2.4.1. Levels of Significance

Where statistical analysis is used to examine the experimental hypotheses, 2-tailed significance is set at 0.05 to determine whether or not they are supported. Where multiple t-tests are used, 2-tailed significance is set at the more conservative level of 0.01.

2.4.2. Normality of the Data

As the sample was a clinical group, it could not be assumed that the data was normally distributed. Therefore the quantitative data from the HADS, the PSWQ, the AnTI and the MCQ were checked for skewness and kurtosis in their distributions (Cramer, 1998). None of the variables showed significant leptokurtosis or platykurtosis. One variable, the positive beliefs subscale of the MCQ was significantly skewed at the 0.05 level in the younger group. None of the other variables were significantly skewed. It was therefore deemed appropriate to use parametric statistical analyses on the data, once the one skewed variable had been transformed by taking the square root of the scores to resemble a more normal distribution (Cramer, 1998)

3. Results

3.1. Sample characteristics

Table 3.1. below illustrates some of the main characteristics of the sample.

	Older Adults (n = 20)	**Younger Adults** (n = 20)
Age range	65 – 83 yrs	19 – 62 yrs
Mean age (SD)	73.20 yrs (5.36)	40.95 yrs (15.28)
Sex –		
male	1	10
female	19	10
Marital status –		
married	11	11
widowed	6	0
single	3	8
divorced	0	1
Diagnosis –		
anxiety	12	14
anxiety & depression	8	2
anxiety & panic	0	4
Current Treatment –		
psychology	11	20
psychiatry	6	0
psychology & psychiatry	3	0

Table 3.1. – Sample characteristics

The older adults ranged in age from 65 to 83 years, with a median age of 74.5 years, a mean age of 73.2 years and a standard deviation of 5.36. The younger adults ranged from 19 years old to 62 years old. This group had a median of 42 years, a mean age of 40.95 years and a standard deviation of 15.28. The considerable differences in the standard deviation for this variable between the groups would suggest that we cannot assume equal variances.

As can be seen from Table 3.1., only one of the older adults sample was male, whereas half the younger adults sample was male. This does make the data significantly biased towards a female perspective, and again this should be borne in mind when interpreting the results. However, given the longer expected lifespan of

females than males this is unfortunately likely to be a feature of most research with this age group (see Section 4.1. for further discussion of this point).

For both groups, the majority were married (55% in each group; n = 11). Unsurprisingly, a higher percentage of the older group were widowed (30%; n = 6) than the younger group (0%), and a higher percentage of the younger group had never been married (40%, n = 8 for the younger group; 15%, n = 3 for the older group). The majority of participants in both groups had a primary diagnosis of an anxiety disorder, with 60% of the older group (n = 12) and 70% of the younger (n = 14) considered by their therapists to be in this category. More of the older group were thought to have an element of depression to their presentation (40% of the older group (n = 8), 10% of the younger group (n = 2)) and more of the younger group experienced symptoms of panic in addition to more general anxiety (20% of the younger group (n = 4) and none of the older group).

Another important difference between the groups highlighted in Table 3.1 is the aforementioned variation in the treatment the participants were receiving. Whereas all the younger group were receiving treatment from a clinical psychologist, 3 of the older group were in addition seeing a psychiatrist, and 6 older adults were *only* seeing a psychiatrist. The degree to which this potentially affected the data will be discussed in section 4.1.

As already stated, to be included in the study participants had to score 8 or more on the anxiety subscale of the HADS, and have a depression score on the same measure of at least one category lower. They also had to score at least 48 on the PSWQ. Table 3.2. below illustrates the sample characteristics on these measures.

	Older Adults (n=20) Mean (SD)	**Younger Adults** (n=20) Mean (SD)	p value (2 tailed)
HADS – anxiety	12.35 (4.21)	12.55 (2.28)	.853
HADS – depression	6.65 (4.03)	6.1 (2.27)	.598
PSWQ	58.95 (8.35)	61.65 (8.81)	.326

Table 3.2. – Mean scores on the HADS and PSWQ, and differences between the means

Independent samples t-tests were used to examine the differences between the groups on the subscales of the HADS and the PSWQ. For both the anxiety and depression subscales of the HADS there were no significant differences between the groups (Anxiety: $t = .187$, $df = 38$, $p > 0.05$, 2-tailed; Depression: $t = .532$, $df = 38$, $p > 0.05$, 2-tailed). There were also no significant differences between the groups on the PSWQ ($t = .995$, $df = 38$, $p > 0.05$, 2-tailed).

The mean scores on the anxiety subscale of the HADS for the older and younger groups were 12.35 and 12.55 respectively, within the clinically anxious range. The mean scores on the depression subscale were 6.65 for the older adults and 6.1 for the younger, within the nonclinical range. Although scoring categories are not available for the PSWQ, the published normative data suggests that the mean score for the general population is 47.65 and for people with GAD 67.66 (Molina & Borkovec, 1994). The mean scores of 58.95 for the older group and 61.65 for the younger group on the PSWQ lie between these two extremes, indicating a higher level of worry than would be found in the population in general but not as high as would be expected from a sample where the participants all had a diagnosis of GAD.

To ensure that the two groups were indeed primarily anxious rather than depressed, the differences between the anxiety and depression subscales of the HADS were also analysed, as Table 3.3. below shows.

	HADS – Anxiety Mean (SD)	**HADS – Depression** Mean (SD)	p value (2-tailed)
Older Adults (n = 20)	12.35 (4.21)	6.65 (4.03)	.000
Younger Adults (n = 20)	12.1 (3.42)	6.1 (2.27)	.000

Table 3.3. – Comparison of scores on the anxiety and depression subscales of the HADS for younger and older groups

Paired samples 2-tailed t-tests were carried out to determine whether there were significant differences in the levels of anxiety and depression as measured by the HADS for both groups. As can be seen from Table 4.3., both the younger and older groups scored significantly more on the anxiety subscale than they did on the depression subscale of the HADS (Older group: $t = 8.232$, $df = 19$, $p < 0.05$, 2-tailed; Younger group: $t = 8.071$, $df = 19$, $p < 0.05$, 2-tailed).

Summary of sample characteristics

In summary, the mean age of the older group was 73.20 years and of the younger group, 40.95 years. However the younger group contained considerably greater variance than did the older group. The groups were similar in terms of diagnosis and marital status. The older group was largely biased in terms of sex, being 95% female. While the younger group were all being treated by a clinical psychologist, some of the older group were being treated by a psychiatrist. Both groups were clinically anxious but were not depressed as measured by the HADS, with their anxiety scores significantly greater than their depression scores. Both groups tended to worry more than the population as a whole. There were no significant differences between the younger and older groups on either of the HADS subscales or the PSWQ.

3.2. Content of Worry

The content of participants' worry was measured in two ways:

1. The Anxious Thoughts Inventory (AnTI)
2. The interview

3.2.1. AnTI data

Independent samples 2-tailed t-tests were used to evaluate the differences between the two groups on the subscales of the AnTI. The results are shown in Table 3.4.

Although the meta-worry subscale of the AnTI is not only a measure of the content of worry, the data is included here for completeness.

AnTI subscale	**Older Adults** (n = 20) Mean (SD)	**Younger Adults** (n = 20) Mean (SD)	p value (2-tailed)
Social worry	16.70 (6.61)	23.00 (6.54)	.004
Health worry	12.20 (3.98)	13.15 (4.66)	.493
Meta-worry	*15.85 (5.43)*	*17.85 (4.78)*	*.224*
Total	44.75 (12.10)	54.00 (11.14)	.016

Table 3.4. – Comparison of group means on the AnTI

A Table 3.4. shows there were no significant differences between the groups on the health worry ($t = .693$, $df = 38$, $p > 0.01$, 2-tailed) and meta-worry ($t = 1.236$, $df = 38$, $p > 0.01$, 2-tailed) subscales of the AnTI. However the younger group reported more social worries as measured by the AnTI than did the older group ($t = 3.029$, $df = 38$, $p < 0.01$, 2-tailed), significant at the 0.01 level. In addition, the younger group scored more highly on the total worry score of the AnTI ($t = 2.515$, $df = 38$, $p < 0.05$, 2-

tailed), but this is not significant at the more conservative 0.01 level. It should be remembered that as the total AnTI score incorporates the meta-worry subscale score it is not purely a measure of content.

The available normative data for the AnTI comes from Wells (1994), and unfortunately is derived from a very small sample (n = 10). The mean subscale scores are presented in Table 3.5. along with the means obtained from this study for clear comparison.

	Social	Health	Meta	Total
Non-clinical	13.8	7.3	11.4	32.5
Older Adults	16.70	12.20	15.85	44.75
Younger Adults	23.00	13.15	17.85	54.00

Table 3.5. – Mean AnTI scores for a non-clinical group from Wells (1994), and for older and younger adults from the present study

As can be seen from Table 3.5., both younger and older groups scored more highly on all three subscales and the total AnTI score than did the non-clinical group reported in Wells (1994).

Summary of AnTI Data

Younger adults worried significantly more about social concerns as measured by the AnTI than did older adults. The total worry score was also higher for younger adults than for older adults, although not significantly so. The two groups did not differ in terms of meta-worry or health worry. Relative to the limited normative data available, both groups scored more highly on all subscales than did non-clinical controls.

3.2.2. Interview data

As part of the semi-structured interview, participants were asked directly what they worried about. The resulting responses were typed up and examined. It had

originally been intended to categorise the data into the domains identified in the Worry Domains Questionnaire, through prior research driven code development (Boyatzis, 1998). However, on initial examination of the raw data it became apparent that a large proportion of the worries identified by participants would not fit into this classification system. It was therefore decided to analyse the data by data-driven inductive code development (Boyatzis, 1998). This involved deriving common themes from the data itself rather than from previous research. The number of times each theme occurred in each group was then counted. Figure 3.1. illustrates the most common themes and their prevalence among younger and older adults. Examples of these themes are then given for each group in the form of quotes from participants.

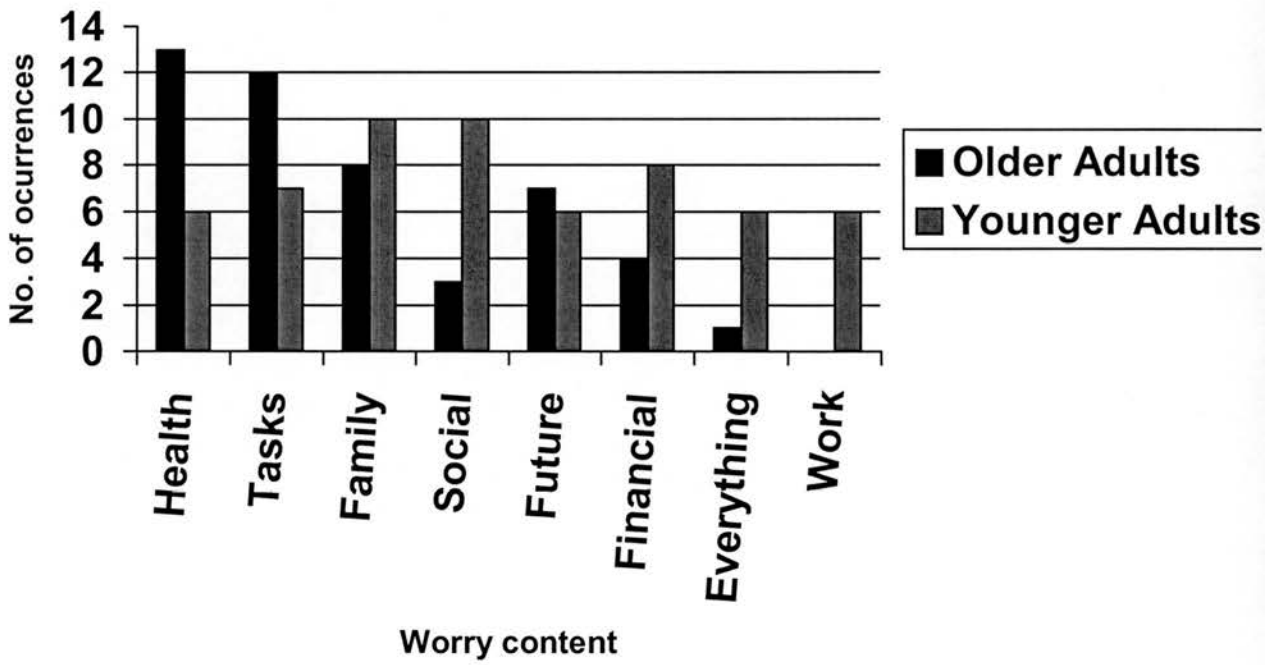

Fig. 3.1. Common worry themes in younger and older adults

Older Adults

As can be seen from Figure 3.1., the topic older adults reported worrying about most frequently was their health. This tended to be expressed as general health worry, but

in some instances related to a particular physical condition the participant either suffered from or had a particular fear of.

E01 *I worry about my health*
E03 *My tinnitus makes me worry, I worry about falling*
E11 *I worry I might have Parkinsons and will deteriorate*

The second most commonly reported topic of worry was being able to carry out practical tasks. This was frequently related to loss of independence and the ability to cope with things alone.

E02 *Coping with the house and garden*
E03 *Not being able to do the housework*
E06 *Getting things done, relying on other people to do things*

The next most common worry for older adults was their family and relationships. This tended to involve the general health and happiness of spouses, children and grandchildren, but the specific worries of being 'a burden' to family and of fanily coping without them were also mentioned.

E04 *My family – my children, my grandchildren, my husband*
E11 *My family watching my deterioration*
E14 *What will happen to my husband if anything happens to me*

Older adults also frequently reported concerns about the future. As with health worries, this was commonly expressed as a general concern with one or two respondents specifying the exact nature of their fears for the future.

E07 *The future*
E09 *Loneliness in the future*
E16 *The future – what will happen when I die, who's going to have to tidy things up?*

A number of older adults also expressed worries relating to their financial circumstances, although these were generally not seen as being a major worry.

E14 *Financial niggles*
E17 *Finances*

Younger Adults

As Figure 3.1. shows, the two most common areas of worry for younger adults were social concerns and their families. Their social worries were generally social-evaluative concerns, a fear of being perceived negatively by other people.

Y10 *What people think about me*
Y13 *How I come across to other people*
Y18 *Making a fool of myself in public*

Again, younger adults' worries about their family centred on the physical and emotional well being of their spouses and children.

Y03 *My children and family*
Y12 *Are my family OK*
Y17 *My wife working too hard*

The next most frequently expressed worry by the younger group was financial, and was expressed either in general terms or related to household management.

Y04 *Money*
Y16 *Bills being paid on time, money*

The younger group also worried about coping with day to day practical tasks, not just those associated with their work.

Y03 *Housework*
Y05 *Everyday life, jobs needing doing*
Y16 *Decorating and gardening*

Perhaps not surprisingly however, work related worries were quite common. These related to a lack of confidence in their own ability to perform their job adequately, or for the students in the sample, to the possibility of failing in their studies.

Y02 *Work, managing work*
Y04 *Job – not being able to do it well, and the consequences for other people*
Y20 *Work, studying – concerned I'm not very good at it*

Equally as common as work-related worries in this group, were worries about health, the future and 'everything'. Again, the health worries were a mixture of general concerns about their health and more specific worries about existing physical conditions.

Y07 *Health – I've had heart attacks, I worry it gets worse*
Y14 *Health, my own and other people's*
Y15 *My dizziness, I worry about it recurring*

None of this group who worried about the future specified exactly what it was about the future which concerned them, and a number of participants simply said they worried about everything.

Y10 *The future, what's going to happen*

Y01 *If there's anything to worry about, I'll worry about it*
Y04 *Anything and everything*

Summary of interview data

The most common worry themes to emerge for the older adults were their health and their ability to perform practical tasks. Worries about the future and their families were also relatively common. The other areas of worry they reported, in descending order, were financial, social and 'everything', with no older adults reporting work or study concerns. The most common worries for the younger group were their families and social-evaluative concerns. Financial worries and coping with practical tasks were the next most common for this group. The other areas mentioned were health, the future, work and 'everything', all of which were reported with the same frequency.

3.2.3. AnTI and interview data

As measured by the AnTI, younger adults worried more than older adults about social concerns, and this was supported by the interview data. The AnTI data did not show a difference between the two groups in terms of health worries. However, the interview data showed older adults to be considerably more concerned with their health than the younger adults. Older adults were also more likely to report worry about coping with practical tasks than younger adults.

Hypothesis 1 - Content of worry

1a - There will be differences in the content of worry between younger and older adults.

This hypothesis is supported by the above data.

1b – Specifically, older adults will worry less about social-evaluative concerns than younger adults.

This hypothesis is supported by the above data.

1c – However younger and older adults will not differ in the degree to which they worry about their health.

This hypothesis is supported by the data from the AnTI but is not supported by the qualitative interview data.

3.3. Meta-Beliefs

Again, information regarding participants' beliefs about their worry came from two sources:

1. The Meta-Cognitions Questionnaire (MCQ)
2. The interview

In addition, the meta-worry subscale of the AnTI measures beliefs about worry. The analysis of this measure was reported in Section 3.2.1. with the results from the other subscales of the AnTI.

3.3.1. MCQ data

Independent samples 2-tailed t-tests were carried out to examine the differences between group means. The results are illustrated in Table 3.6. As mentioned in Section 2.4.2. the MCQ subscale measuring problem solving and positive worry beliefs was transformed before being analysed.

MCQ subscale	**Older Adults** (n = 20) Mean (SD)	**Younger Adults** (n = 20) Mean (SD)	p value (2-tailed)
Neg	25.10 (5.59)	27.95 (7.90)	.196
Con	40.00 (12.15)	45.25 (8.89)	.127
Eff	21.35 (9.532)	23.20 (8.47)	.521
Pos*	5.53 (0.97)	5.79 (1.05)	.415
SC	16.00 (5.22)	17.80 (4.87)	.267
Total	133.90 (27.51)	148.80 (29.72)	.108

Table 3.6. – Comparison of group means on the MCQ
Neg = general negative beliefs (including superstition and worry); Con = beliefs about controllability; Eff = meta-cognitive-efficiency; Pos = problem solving and positive worry beliefs; SC = cognitive self-consciousness
* = data transformed because of significant skew

Table 3.6. shows that there were no significant differences between the groups on the general negative beliefs ($t = 1.317$, $df = 38$, $p > 0.01$, 2-tailed), beliefs about controllability ($t = 1.559$, $df = 38$, $p > 0.01$, 2-tailed), meta-cognitive efficiency ($t = .649$, $df = 38$, $p > 0.01$, 2-tailed), positive worry beliefs ($t = .825$, $df = 38$, $p > 0.01$, 2-tailed) or cognitive self-consciousness ($t = 1.127$, $df = 38$, $p > 0.01$, 2-tailed) subscales of the MCQ. There was also no difference between the groups on the total MCQ score ($t = 1.646$, $df = 38$, $p > 0.01$, 2-tailed).

Mean scores obtained in the study were considered in relation to available norms (Cartwright-Hatton & Wells, 1997). Again these are somewhat limited but are reproduced below with the means obtained in this study for comparison. The means stated for the positive beliefs subscale are given in their untransformed state.

MCQ subscale	**Control**	**GAD**	**Older Adults**	**Younger Adults**
Neg	19.7	27.7	25.1	27.95
Con	26.0	47.5	40.0	45.25
Eff	15.5	22.8	21.35	23.2
Pos	29.6	32.9	31.45	34.6
SC	14.9	16.5	16.0	17.8

Table 3.7. – Mean scores of the MCQ subscales for previously researched samples (controls and GAD patients; Cartwright-Hatton & Wells, 1997) and the samples obtained in the present study
Neg = general negative beliefs (including superstition and worry); Con = beliefs about controllability; Eff = meta-cognitive-efficiency; Pos = problem solving and positive worry beliefs; SC = cognitive self-consciousness

Table 3.7. suggests that the older and younger groups both scored in a similar range to participants with GAD, as found in previous research by Cartwright-Hatton & Wells (1997). This was despite the fact that participants in this study were not specifically screened to have GAD.

Summary of MCQ and AnTI data

There were no significant differences between the groups on any of the subscales of the MCQ or on the total MCQ score. Both the older and younger groups appeared to have scores on the MCQ subscales in the range expected for people with a diagnosis of GAD. As mentioned in Section 3.2.1 the groups also did not differ on degree of meta-worry as measured by the AnTI.

3.3.2. Interview data

Wells (1995) found that the best predictor of how problematic participants' rated their worry to be was a combination of their meta-worry score on the AnTI and their answer to 'How much do you worry about your worrying thoughts?' The question assessing meta-worry in the interview was 'Do you worry about how much you worry?'. Table 3.8. summarises participants' answers.

	Older Adults (n = 20)	Younger Adults (n = 20)
Yes	16	11
No	4	9

Table 3.8. – Do you worry about how much you worry?

As Table 3.8. shows, 80 % of the older group (n = 16) compared with 55% of the younger group (n = 11) reported worrying about their worry.

3.3.3. MCQ and interview data

The two groups did not differ on any of the subscales of the MCQ, nor on the meta-worry subscale of the AnTI. The interview data suggested that older adults *may* worry more about their worry than younger adults.

Hypothesis 2 – Meta-beliefs about worry

2a – Meta-worry will be a feature of the worry of both younger and older adults.

This hypothesis was supported by the above data.

2b – Older adults will believe their worry to be more uncontrollable than will younger adults.

This hypothesis was not supported by the above data.

3.4. Coping With Worry

This data was all gathered from the interviews. Participants were asked five questions assessing the type and effectiveness of coping strategies they used in an attempt to control their worry and its negative consequences. These questions were:

1. What do you do to help yourself cope with your worry?
2. Do these things work?
3. What works best?
4. What do you use most often?
5. Are there any disadvantages of using these things? What are they?

3.4.1. Types of Coping Strategy

When asked what they did to cope with their worry, participants generated a substantial number of strategies. Most people used a variety of different strategies, with the older group averaging 2.95 methods each and the younger slightly more at 3.7. The data was analysed using prior research driven code development (Boyatzis, 1998). Participants' responses were typed up and categorised into Billings & Moos' (1981) methods and foci of coping as detailed earlier in Section 1.6. The total number of strategies in each category was then counted, as well as the number of different participants who used each type of strategy. The results of this analysis are presented in Table 3.9. below, followed by examples of the types of strategies both groups used. The number preceding each quote refers to the participant number, with the prefacing letter corresponding to the group. E refers to members of the older adults group and Y to members of the younger group.

	Older Adults (n = 20) No. of strategies (no. of participants)	**Younger Adults** (n = 20) No. of strategies (no. of participants)
Total number of coping strategies	59	74
Avoidance	8 (7)	19 (11)
Active cognitive	14 (10)	10 (7)
Active behavioural	37 (16)	45 (19)
Problem focused	8 (8)	9 (8)
Emotion focused	43 (18)	46 (19)
Cognitive - problem focused	0	0
Cognitive - emotion focused	14 (10)	9 (7)
Behavioural - problem focused	8 (8)	9 (8)
Behavioural - emotion focused	29 (15)	36 (18)

Table 3.9. – Types of coping strategy used by younger and older adults

Avoidance Strategies

E08 *I keep it to myself*
E17 *I drink a little more*

Y14 *Get snappy with people*
Y17 *Eat more*

Active Cognitive Problem Focused Strategies

No participants in either group used this method of coping strategy.

Active Cognitive Emotion Focused Strategies

E14 *Pray, I'm a church-goer*
E18 *Try to look on the positive side*

Y05 *Sit down, try to forget it, think back to what doing before*
Y15 *Talk myself down in my head*

Active Behavioural Problem Focused Strategies

E02 *Discuss the worry with my sister*
E16 *Force myself to cope with whatever I'm worrying about*

Y14 *Phone relatives and friends, talk about the problem*
Y20 *try to work more, to do the work I'm worrying about*

Active Behavioural Emotion Focused Strategies

E13 *Go to my bedroom and do my relaxation tape and breathing exercises*
E20 *Do something active like housework or baking or walking*

Y10 *Keep busy – sport, activities, computer, watch a film*
Y18 *Physical occupation, like gardening, DIY*

Summary of types of coping

Both groups of participants used a variety of strategies in an attempt to manage their worry. Both older and younger adults were more likely to use emotion-focused and behavioural strategies, rather than problem-focused and cognitive strategies. The most frequently reported strategies for both groups were active behavioural emotion focused methods. The least common strategies were active cognitive problem focused methods, with neither group reporting any use of these. The patterns of coping strategies appeared quite similar in both groups, but younger adults did report using avoidance more often than older adults. There were also small differences in behavioural emotion focused coping (slightly more common in younger adults) and cognitive emotion focused coping (slightly more common in older adults).

3.4.2. Efficacy of Coping Strategies

Participants were asked if the methods of coping with worry they used were effective. 80% (n = 16) of the older adults and 85% (n = 17) of the younger adults reported having at least one strategy which they found helpful. The data regarding which strategies were found to be most effective was again analysed using data-driven inductive code development (Boyatzis, 1998). The results of this analysis are presented in Figure 3.2. below, and followed by examples in the form of quotes from both groups.

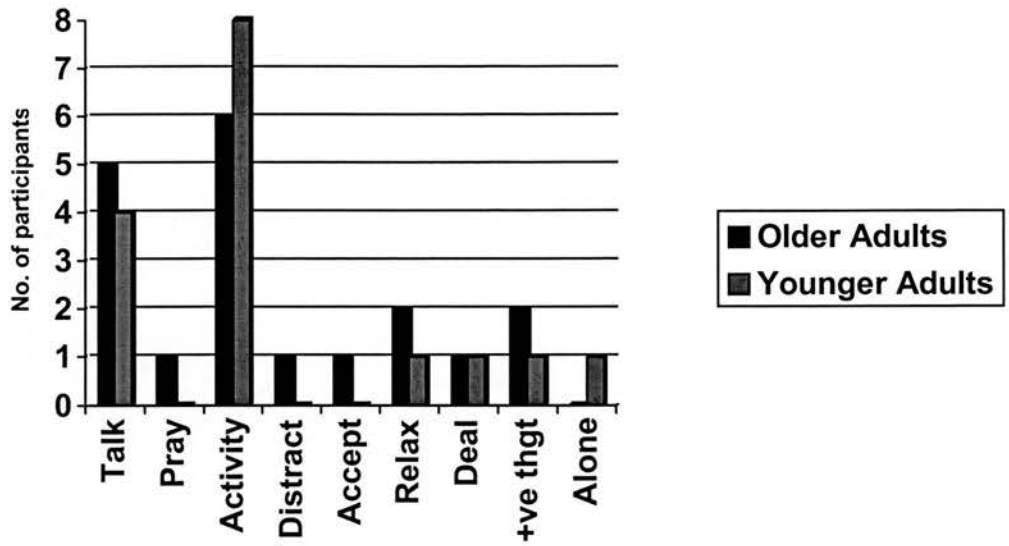

Fig 3.2. Perceived effectiveness of coping strategies for younger and older adults

Older Adults

As Figure 3.2. shows, the strategy this group found most effective for dealing with worry was some form of activity.

E06 *Pottering, being active*
E17 *Some type of work, gardening, exercise*

Almost rated as highly by the older group was talking to someone, particularly a relative.

E02 *Talking to my sister*
E05 *Talking to family, having a sounding board*

A few participants from this group also found relaxation and positive thinking to be the most effective way they had of dealing with worry.

E14 *Listening to soothing music, my relaxation tape*

E20 *Trying to be positive*

Finally, praying, distraction, acceptance and dealing with the problem were all rated as the best coping strategy available to them by one participant each in the older adults group.

E02 *Praying*

E07 *Anything that takes your mind off it*

E08 *Just getting on with things and trying to accept it – once you've accepted things it makes life a bit easier*

E16 *Dealing with the problems*

Younger Adults

As with the older group, the strategy regarded as the most effective method of coping with worry for the younger adults was being active.

Y08 *Probably something physical like housework, DIY*
Y17 *Any activity, especially gardening*

Again, the second most commonly perceived as effective method was talking to someone, although unlike the older group younger adults were more likely to consult friends than family members.

Y03 *Talking to a friend*
Y11 *Telephoning friends and family*

One participant each endorsed relaxation, dealing with the problem, positive thinking and being alone as their favoured method of coping with worry.

Y04 *Relaxation at the moment, now I've found one that suits me*

Y13 *Acting on the problem if it's solveable*

Y15 *Talking to self positively*

Y05 *Maybe sitting down by myself*

Summary of efficacy of coping strategies

Both younger and older adults found some form of activity to be the most effective method of managing their worry, and talking to either a friend or relative about the problem the second best strategy. Although a few participants reported finding other strategies the most effective, activity and talking were by far the most common choices, accounting for over 65% of the data.

3.4.3. Utilisation of Coping Strategies

Figure 3.3. below illustrates the methods of coping participants used the most often. As before, data analysis was by data-driven inductive code development, and Figure 3.3 is followed by examples from each group.

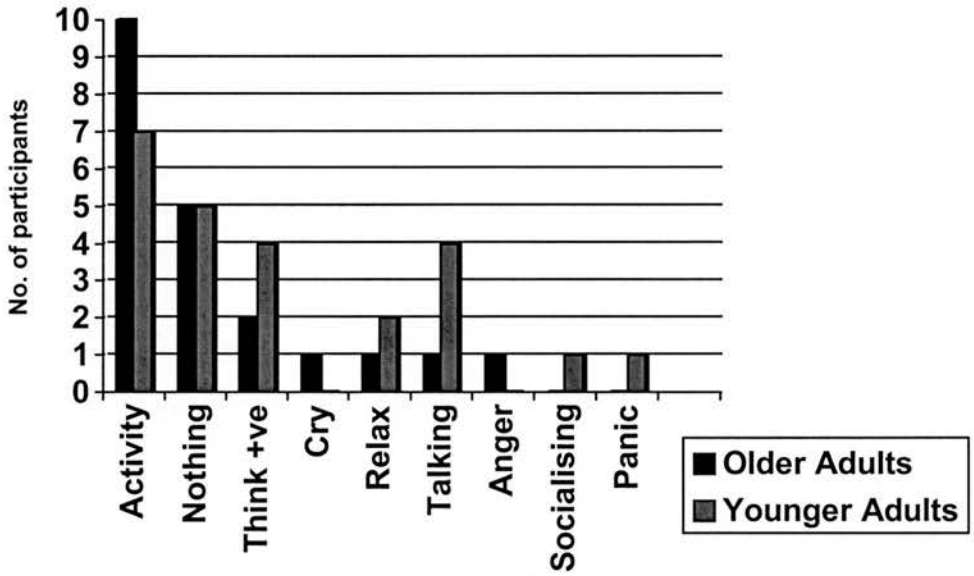

Figure 3.3. – The coping strategies most often used by older and younger adults

Older Adults

By far the most commonly used coping strategy in this group was physical activity, with half the sample reporting using this method of coping most often.

E02 *Being active – doing a little bit of housework*
E06 *Deep breaths, tidy up, write letters and so on*

The next most common response to this question was that the participants usually didn't actually do anything to deal with their worry.

E03 *Usually do nothing*
E15 *Usually can't do anything to stop it*

Two members of the older group reported that they tended to use positive thinking most often, and one each tended to use crying, relaxation, talking and getting angry.

E04 *Usually lie down first, then try to think positively and reassure self*
E18 *Positive thinking*

E08 *Have a good greet – usually feel a bit relieved after it's all out, after it's over*

E11 *Lie on the bed and try to relax*

E12 *Talking to friends*

E14 *Lose temper*

Younger Adults

The most frequently used method of coping with worry for this group was also activity.

Y02 *Getting on with things*
Y06 *Jogging and reading*

Again, doing nothing was also a fairly common response to worry.

Y01 *Usually nothing*
Y05 *Usually go along with worry, let it take its course, can't talk myself out of it*

Adopting a more positive thinking style and talking to other people were the methods of coping rated as next most commonly used.

Y11 *Trying to put worry in perspective*
Y13 *Try to focus on what's important*

Y14 *Phoning friends and family*
Y18 *Talking to wife*

Two younger group members reported using relaxation techniques most often, and one participant each rated socialising and panic as the strategies they tended to use.

Y11 *Breathing exercises*
Y18 *Breathing exercises – use these more as the worrying event approaches, adds to the sense of control*

Y07 *Socialising*

Y11 *Panic*

Summary of utilisation of coping strategies

Both younger and older adults reported most commonly using activity to control their worry. The second most commonly reported response to worry for both groups was to do nothing to try to deal with it. Younger adults were slightly more likely than older adults to use talking and positive thinking most often.

3.4.4. Disadvantages of Coping Strategies

In total 60% of the older adults (n = 12) and 70% (n = 14) of the younger adults identified at least one disadvantage of dealing with their worry in the way that they did. This data was also analysed for recurrent themes, with the following results.

Older Adults

The coping strategy which most participants identified as having disadvantages was ***talking*** to someone about the worry. Talking was thought to have several different disadvantages, including boring or burdening the listener and a lack of understanding from family and friends.

E05 *Can't always talk – if worry quite big then I can't talk about it, sweep it under the carpet. It can take a while to broach the subject*
E06 *Younger people don't always understand when you talk to them*
E07 *People can find it difficult to comment, can feel guilty boring people*

Several of the older adult group also reported disadvantages with using ***activity*** as a coping strategy. This tended to be related to the physical consequences of being active, and in some cases to existing physical health problems.

E02 *I have cataracts so knitting can be difficult, a strain on the eyes. Back problems can also prevent me from doing too much housework*
E03 *Housework can lead to physical pain after*
E12 *Overdid activity and became physically exhausted*

Two members of this group also identified the obvious disadvantage of using ***smoking*** as a coping strategy (i.e. the health risk). Another two participants felt that there were negative consequence of using ***distraction*** and ***losing your temper*** in response to worry.

E16 *If the worry is pushed to the side the problem is still there, lurking*
E14 *I start swearing if I lose my temper, relieves the pressure but I feel guilty afterwards*

Younger Adults

More disadvantages of ***drinking and eating*** as ways of attempting to deal with worry were identified by this group than any other strategy. These were generally that eating more leads to weight gain and drinking more is bad for your health.

Y16 *Eating – start worrying about putting weight on*
Y08 *Excess drinking is bad for you*

This group also reported several perceived disadvantages of ***distracting*** yourself from your worry. These tended to be either that it wasn't always possible to take your mind off your worry by doing or thinking about something else, or else that stopping thinking about the worrying problem didn't make it go away.

Y10 *Physical things sometimes don't take your mind of things*
Y19 *Only slight distraction, only gives something to hide behind. None actually help solve the problem*

As with the older adults, this group also reported some disadvantages associated with ***talking*** to people about their worry. Again the fear of burdening friends and family with their problems was mentioned.

Y02 *Can't always find someone to talk to*
Y12 *Don't talk to family much because I know they have their own worries*
Y14 *A huge phone bill!*

Another way of coping which more than one member of the younger adults group stated had disadvantages was being ***irritable*** with others. This was seen as leading to guilt and exacerbating the original problem.

Y14 *Being snappy makes things worse*
Y18 *If I'm irritable I feel guilty afterwards*

Specific disadvantages of ***sport***, trying to ***control thoughts,*** going to ***bed*** and ***list making*** were also identified by this group.

Y04 *Sport makes me more aggressive*

Y13 *Can make my thinking less clear, things are more difficult if you're fighting with your own mind*

Y16 *Going to bed – it's just crawling away from life altogether*

Y20 *Making a list – the list can get so long it becomes a worry in itself*

Summary of disadvantages of coping strategies

The older and younger groups differed in terms of the disadvantages they perceived of methods of coping. Older adults identified a number of disadvantages associated with talking to someone about their worry, including a lack of understanding and fear of burdening others. They also reported physical problems with using activity as a coping strategy. The younger adult group noted the health costs associated with increased eating and drinking. They also reported some disadvantages of attempting to manage worry by distraction, namely that it was not always possible to successfully shift attention to something else, and that stopping thinking about a worrying problem did not solve it.

Summary of coping with worry

Younger and older adults use similar strategies to cope with their worry, although younger adults may be more likely to use avoidance. Both the younger and the older groups found activity and talking to be the most effective strategies for dealing with their worry. Both groups reported being most likely to respond to worry by some form of activity, with doing nothing to manage worry the second most common response. Younger adults may be slightly more likely to respond to worry by talking to someone and by positive thinking than older adults. The older adult group reported the disadvantages of talking to someone about their worry and of using activity as a coping strategy. The younger group also noted the disadvantages of talking, and added problems with eating and drinking, and with distraction.

Hypothesis 3 – Strategies for coping with worry

1a – Older and younger adults will use similar coping strategies for dealing with their worry

This hypothesis is supported by the above data.

1b However older adults will use positive appraisal more often than younger adults.

This hypothesis is not supported by the above data.

1c – Younger adults will use social support more than older adults.

This hypothesis received slight support from the above data.

4. Discussion

4.1. Methodological Limitations

There are a number of methodological limitations of this study that must be borne in mind while considering the results obtained. The first of these is the previously mentioned failure to obtain the sample size required for adequate statistical power. This was mainly due to time constraints inherent in gathering data from several geographical districts. The obtained sample size of two groups of twenty instead of the required twenty-six means that the study does not have the appropriate level of statistical power, and the significance of the statistical analyses should be interpreted with some caution.

Another methodological difficulty with this study was the administration of the questionnaires. In order to both reduce the anxiety, particularly of the older group, and aid the comprehension of participants, the questionnaires were administered orally. This obviously reduces the validity of comparing the scores obtained here with published norms taken from samples where participants completed the questionnaires in written form. However, the main aim of this study was to compare the younger and older groups with each other, rather than with previous research. The questionnaires were read to both groups, in an attempt to keep experimental conditions stable across the groups. In addition participants were given a sheet with a scale from which they could choose their answers for each questionnaire, in order to replicate the written forms as closely as possible.

It did not prove possible to obtain all the information originally intended from the interview. Having any degree of organic pathology was an exclusion criterion, and it had been intended to check the Mini-Mental State Examination (MMSE) (Folstein, Folstein & McHugh, 1975) scores of the older adult participants to ensure that they did not have any obvious cognitive impairment. However once data collection was commenced it became apparent that very few of the older adults had actually had a MMSE administered, although this had been thought to be standard practice in the

areas from which the participants were recruited. Nevertheless, in the same way that the psychologists and psychiatrists only attempted to recruit participants who were suitably anxious for this study, they also screened out any obviously cognitively impaired clients. It is likely that even if any participants with a degree of organic pathology did slip through this initial screening, their degree of impairment was likely to have been so slight that it would not have been detected by the MMSE even if scores had been available

Another variable it had been hoped to examine was the prevalence and types of medication in each group. Unfortunately most of the participants who were taking some form of prescribed medication were unable to recall the names of their medicine, and in some cases were unsure what condition it had been prescribed for. This meant that this information could not be collected, as it was not always possible to obtain access to the participants' medical case notes where their medication would have been listed.

The problems with the sample characteristics also bear repeating here. Although the younger group consisted of an equal number of males and females, the older adults were, with one exception, female. Given the relative longevity of women this is not an unexpected bias, but nevertheless does limit the generalisability of the results obtained. Wisocki (1994) states that as yet no significant gender differences have been found in studies of worry in older adults, but that this is tempered by the disproportionate amount of females in the research. It is therefore difficult to tell whether the lack of older males in this study significantly affected the results. The study of worry specifically in older men way well be an avenue for future research.

Finally, the older and younger samples differed in terms of the treatment they were receiving for their anxiety. All of the younger group were seeing a clinical psychologist, whereas a number of the older group were attending a psychiatrist. As discussed in Section 2.3.1. practical constraints made this unavoidable. However it does potentially add a confounding variable to the data. It could be hypothesised that the anxiety of individual's who are referred to and subsequently attend a psychiatrist

is in some way different from that of people who are referred to a clinical psychologist. It could also be argued that the differing treatments of psychologists and psychiatrists would lead to a difference in ways of coping with worry.

To examine this further, independent 2-tailed t-tests were carried out on the questionnaire subscales to look at differences in the mean scores of older adults attending a psychologist and a psychiatrist. Interestingly, the only variable on which they differed significantly was the anxiety subscale of the HADS, where older adults attending a psychiatrist scored more highly ($t = .754$, $df = 18$, $p<0.05$, 2-tailed). It could therefore be hypothesised that older adults who attend a psychiatrist for treatment of an anxiety disorder are likely to have more severe symptoms than those who attend a clinical psychologist. In terms of this study, this finding could suggest that by selecting participants from both psychology and psychiatry departments, while the inclusion criteria were identical, slightly different populations were sampled. To ensure greater similarity of the younger and older samples, it would have been preferable if either all the older group had come from psychology departments, or if the younger group had also been selected from both psychology and psychiatry departments.

4.2. The Content of Worry in Younger and Older Adults

As has been shown, the results mostly supported the hypotheses relating to the content of worry. In line with previous research (Powers et al, 1992), older adults worried significantly less than younger adults about social-evaluative concerns. However the results regarding health worries are worth discussing in more detail. It was hypothesised that older adults would not differ from younger adults on this variable, following the work of Powers et al (1992). Indeed the health subscale of the AnTI supported this. However the qualitative data presented a very different picture. When older adults were asked directly what they worried about, health featured much more than it did when they had to select health related items from a questionnaire.

This would suggest that perhaps the health subscale of the AnTI does not tap into the significant number of health worries which older adults appear to have. The health worries which older adults expressed were mostly fairly vague, with a general sense of unease about their health. Some of the health items on the AnTI are quite specific, relating to particular illnesses and the exaggeration of physical symptoms. There is perhaps a mismatch between the measure of health-related worry and its experience for older adults. In addition, one of the items contributing to the health subscale is 'I worry about death'. In conducting the research, it appeared as if this was something which older adults made a point of saying they did *not* worry about. Several participants stated that although they worried about a physical and mental decline before death, they did not worry about death itself. This impression contrasts with the findings of Cooper (1998) who found a 'death and appearance' factor when she analysed the AnTI with older adults. As Cooper (1998) states it would indeed appear that there is not as yet a valid, reliable measure for accurately assessing the pathological worry of older adults.

Powers et al's (1992) original hypothesis that older adults were less future oriented than younger adults was not supported by this study. Both groups reported worrying almost equally about the future. Powers et al (1992) also suggested that older adults

worried less about financial concerns, a finding replicated in this study. It had been thought that this might be a feature of Powers et al's (1992) relatively affluent US sample, but the lack of financial concerns in the sample from central Scotland makes this less likely. As no measures of actual financial status were taken it is impossible to say whether the younger group had more objective financial worries, or whether they perceived the money worries they did have as of greater importance.

4.3. Meta-Beliefs in Younger and Older Adults

As the results demonstrate, both younger and older anxious adults have meta-worry as part of their presentation. However as the groups did not differ significantly on the controllability subscale, the hypothesis that older adults would find their worry harder to control is not supported. In fact, the younger group scored slightly more highly on all the subscales of the MCQ, although not to a statistically significant degree. Interestingly, the interview showed a trend towards older adults being more likely to report worrying about their worry than younger adults. It would be interesting to see if these findings could be replicated to a statistically significant level with a larger sample, as they seem to contradict each other. However without statistical significance it is acknowledged that this is pure speculation.

The authors of the MCQ (Cartwright-Hatton & Wells, 1997) acknowledge that it is not a perfect instrument. They point out that there is a degree of overlap between the dimensions of meta-cognition, and that all the questionnaire items may not be necessary. It was certainly felt to be very repetitive by the participants in this study, with almost half of them commenting to this effect. Another seven of the sample stated that they found it very difficult and they had to think much harder about it than the other questionnaires administered. Three participants, all from the younger group, stated that they found it fairly unpleasant to complete.

Y14 *It's long, quite irritating. I was glad it was finished when I got to the end*

Y15 *This would make really worried people a hundred times worse, it's kind of silly*

Y19 *This has no relevance to how I feel*

Any measure which so many people find repetitive at best and irritating at worst has to have limited use in clinical settings. Even for research purposes, administering a questionnaire which participants dislike has ethical implications. Although a measure for the assessment of the dimensions of meta-cognition is clearly an important addition to the field of worry research, the MCQ would appear to need to be made more 'user-friendly' before being more widely used.

4.4. The Management of Worry in Younger and Older Adults

Following the work of Cappaliez (1988) it was hypothesised that older adults would seek less social support in response to their worries than would younger adults. The qualitative data from the interview indicates that older adults are less likely to seek out someone with whom to discuss their worries than their younger counterparts. This is despite the fact that they rated talking as the second most effective way of dealing with worry, with almost the same frequency as the younger group. This would suggest that there are some costs associated with discussing their worries that prevent older adults from utilising this strategy more often. The disadvantages of talking highlighted by this group included the wish not to bore or burden the listener. This sits comfortably with Cappaliez's (1988) theory that independence and self-control are important in maintaining the self-esteem of older adults, while interfering with the effective regulation of anxiety. This also has implications for therapy. Older adults may need to be reassured that they are not boring or burdening the therapist when discussing their concerns, and therapy should aim to increase adaptive coping without reducing self-esteem.

Another interesting finding which emerged from the qualitative data analysis was the prevalence of doing nothing in response to worry. Although virtually all the respondents could identify two or three ways of coping with their worry, and these were perceived as being in the main effective, the second most common 'coping strategy' was to do nothing. This was true of both the older and the younger groups. This could be because of the associated costs of various controlling strategies. Most participants reported at least one disadvantage of the way in which they coped with their worry. It could also be related to the difference between knowing that there are things which could help, and being able to carry them out. As one participant put it;

Y01 *I know what I* should *be doing, but it's hard to implement sometimes*

The data analysis also indicated that older adults are less likely to use avoidance as a coping strategy, than are younger adults. This could be seen to lend support to the growth hypothesis of coping (McCrae, 1982). Avoidance is seen as an immature

coping mechanism, which the older adults in this sample would appear to have 'grown out of' to a certain extent.

Another two coping mechanisms are worthy of a brief mention; religious behaviour and positive thinking. The first of these was used by very few participants in either group, suggesting that praying and other religious behaviours were not seen as particularly helpful in managing worry. However no measures of religiosity were taken, and it is unclear what the beliefs of the sample were. It would be interesting to compare religious worriers with non-religious worriers to see if their coping strategies or worry appraisals differed at all. The second mechanism here, positive thinking, was expected to be found more frequently in the older adults group than it actually was. This could suggest that for clinical groups positive appraisal is seen as either of little use or as too difficult to accomplish.

Finally, the results also indicate that older adults use more cognitive emotion-focused coping methods and fewer behavioural emotion-focused coping methods than the younger group. This may well be at least partly a function of the high level of physical costs associated with behavioural coping identified by older adults. If behavioural coping strategies are likely to lead to pain or tiredness, it would seem reasonable to substitute cognitive strategies in their place. Another factor may be related to the content of worry. Older adults may be more likely to worry about health concerns, which are unlikely to be without foundation (Gillanders et al, 1992). It could be argued that cognitive emotion-focused coping is the most adaptive way of dealing with this type of concern. That is, where the problem is objective, physically limiting and with little room for personal control, perhaps ameliorating the negative emotional consequences of this by cognitive methods is the most effective strategy available.

4.5. Directions for Future Research

The implications of this study are limited by the methodological considerations outlined in Section 4.1. However it would appear to indicate that while worry in older and younger adults is similar in many ways, there do appear to be a few differences in terms of both the content of their worry and the strategies they use to control it.

Given the methodological weaknesses, this study should be repeated with tighter control of the sample characteristics and larger samples. This would demonstrate whether or not the findings of the present study were reliable or at all valid.

It is also important to bear in mind that measures of worry such as the AnTI may not accurately assess the concerns of an older population. This highlights the value of qualitative research in this field.

It would perhaps be useful to look at differences in meta-worry between older and younger adults, but there remains the problem of a suitable measure. However a subsequent revision of the MCQ may fill this gap.

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6. Appendices

Participant information leaflets

Consent form

Hospital Anxiety and Depression Scale (HADS)

Penn State Worry Questionnaire (PSWQ)

Anxious Thoughts Inventory (AnTI)

Meta-Cognitions Questionnaire (MCQ)

Interview schedule

The Content and Management of Worry in Younger and Older People

Participant Information Leaflet

We are currently carrying out a study to find out whether older people worry about different things from younger people, and whether or not they try to control worry in different ways. To do this we are asking a group of people over 65 and another group of people under 65 some questions about worrying, and comparing their answers.

If you agree to take part, we would like to ask you some questions about how much you worry, how you feel about your worries and what you do to cope with them. This would take around forty minutes, and would take place either at the time of your next routine psychology appointment or at a more convenient time in your own home. This can be arranged either during the day or in the evening.

Even if you do agree to take part you do not have to answer any questions you don't want to. If you decide not to participate in our study, any clinical treatment you are receiving will not be affected in any way. Please do not feel the need to hurry to decide as you can take as long as you need to make up your mind.

If you are interested, when the study is completed you can be sent a copy of the main conclusions. These will be submitted to the University of Edinburgh as part of a training course, but will be completely anonymous. Any information which could identify you will be kept separate from what you tell us about your worrying.

If you have any questions about the study in general or what we would like you to do, please feel free to ask at any time or contact me directly at the address below.

Jennifer Borthwick
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The Content and Management of Worry in Younger and Older People

Participant Information Leaflet

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Even if you do agree to take part you do not have to answer any questions you don't want to. If you decide not to participate in our study, any clinical treatment you are receiving will not be affected in any way. Please do not feel the need to hurry to decide as you can take as long as you need to make up your mind.

The results of the study will be submitted to the University of Edinburgh as part of a training course, but will be completely anonymous. Any information which could identify you will be kept separate from what you tell us about your worrying. If you are interested, when the study is completed you can be sent a copy of the main conclusions.

If you have any questions about the study in general or what we would like you to do, please feel free to ask at any time or contact either myself or the study's independent advisor at the address below.

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The Content and Management of Worry in Younger and Older Adults

Consent Form

By signing this form, I am consenting to participate in the above study. I have read the participant information sheet and understand the nature of the study.

I understand that I do not have to take part in the study if I do not wish to, and that I can withdraw from the study at any time.

I understand that my treatment will not be affected if I decide not to take part.

I understand that my responses will remain anonymous and will not be used for any purpose other than the current study.

I understand that any relevant information may be given to the clinical team following discussion with myself.

I _____(please sign along

the line) agree to take part in the above study.

Witness signature _____

(please also print name) _____

Participant Number:_____

Hospital Anxiety and Depression Scale (HADS)

NFER-NELSON
INFORMING YOUR DECISIONS

Name: _____ Date: _____

FOLD HERE

Clinicians are aware that emotions play an important part in most illnesses. If your clinician knows about these feelings he or she will be able to help you more.

This questionnaire is designed to help your clinician to know how you feel. Read each item below and **underline the reply** which comes closest to how you have been feeling in the past week. Ignore the numbers printed at the edge of the questionnaire.

Don't take too long over your replies, your immediate reaction to each item will probably be more accurate than a long, thought-out response.

FOLD HERE

A	D		A	D
		I feel tense or 'wound up'		
3		Most of the time		3
2		A lot of the time		2
1		From time to time, occasionally		1
0		Not at all		0
		I still enjoy the things I used to enjoy		
	0	Definitely as much		
	1	Not quite so much		
	2	Only a little		
	3	Hardly at all		
		I get a sort of frightened feeling as if something awful is about to happen		
3		Very definitely and quite badly		
2		Yes, but not too badly		
1		A little, but it doesn't worry me		
0		Not at all		
		I can laugh and see the funny side of things		
	0	As much as I always could		
	1	Not quite so much now		
	2	Definitely not so much now		
	3	Not at all		
		Worrying thoughts go through my mind		
3		A great deal of the time		
2		A lot of the time		
1		Not too often		
0		Very little		
		I feel cheerful		
	3	Never		
	2	Not often		
	1	Sometimes		
	0	Most of the time		
		I can sit at ease and feel relaxed		
0		Definitely		
1		Usually		
2		Not often		
3		Not at all		
		I feel as if I am slowed down		
		Nearly all the time		3
		Very often		2
		Sometimes		1
		Not at all		0
		I get a sort of frightened feeling like 'butterflies' in the stomach		
		Not at all	0	
		Occasionally	1	
		Quite often	2	
		Very often	3	
		I have lost interest in my appearance		
		Definitely		3
		I don't take as much care as I should		2
		I may not take quite as much care		1
		I take just as much care as ever		0
		I feel restless as if I have to be on the move		
		Very much indeed	3	
		Quite a lot	2	
		Not very much	1	
		Not at all	0	
		I look forward with enjoyment to things		
		As much as I ever did		0
		Rather less than I used to		1
		Definitely less than I used to		2
		Hardly at all		3
		I get sudden feelings of panic		
		Very often indeed	3	
		Quite often	2	
		Not very often	1	
		Not at all	0	
		I can enjoy a good book or radio or television programme		
		Often		0
		Sometimes		1
		Not often		2
		Very seldom		3

Now check that you have answered all the questions

A	D

TOTAL

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Pennsylvania State Worry Questionnaire

Name: Date: ID:

Instructions: A number of statements which people have used to describe themselves are given below. Enter the number that best describes how typical or characteristic each item is of you, putting the number in the box next to each item. There are no right or wrong answers. Do not spend too much time on any statement but give the answer which seems to describe how you generally feel.

1 Not at all typical **2** **3** Somewhat typical **4** **5** Very typical

1.	If I don't have enough time to do everything, I don't worry about it	
2.	My worries overwhelm me	
3.	I don't tend to worry about things	
4.	Many situations make me worry	
5.	I know I shouldn't worry about things, but I just can't help it	
6.	When I'm under pressure, I worry a lot	
7.	I am always worrying about something	
8.	I find it easy to dismiss worrisome thoughts	
9.	As soon as I finish one task, I start to worry about everything else I have to do	
10.	I never worry about anything	
11.	When there is nothing more I can do about a concern, I don't worry about it anymore	
12.	I've been a worrier all my life	
13.	I notice that I have been worrying about things	
14.	Once I start worrying, I can't stop	
15.	I worry all the time	
16.	I worry about projects until they are all done	

ID: Date:

Anxious Thoughts Inventory (AnTI)

Developed by Adrian Wells

Instructions: A number of statements which people have used to describe their thoughts and worries are given below. Read each statement and put a circle around the most appropriate number to indicate how often you have these thoughts and worries.

Do not spend too much time on each statement. There are no right or wrong answers and the first response to each item is often the most accurate.

		Almost never	*Sometimes*	*Often*	*Almost never*
1.	I worry about my appearance	**1**	**2**	**3**	**4**
2.	I think I am a failure	**1**	**2**	**3**	**4**
3.	When looking to my future I give more thought to the negative things than the positive things that might happen to me	**1**	**2**	**3**	**4**
4.	If I experience unexpected physical symptoms I have a tendency to think the worst possible thing is wrong with me	**1**	**2**	**3**	**4**
5.	I have thoughts about becoming seriously ill	**1**	**2**	**3**	**4**
6.	I have difficulty clearing my mind of repetitive thoughts	**1**	**2**	**3**	**4**
7.	I worry about having a heart attack or cancer	**1**	**2**	**3**	**4**
8.	I worry about saying or doing the wrong things when among strangers	**1**	**2**	**3**	**4**
9.	I worry about my abilities not living up to other people's expectation	**1**	**2**	**3**	**4**

		Almost never	*Sometimes*	*Often*	*Almost always*
10.	I worry about my physical health	**1**	**2**	**3**	**4**
11.	I worry that I cannot control my thoughts as well as I would like to	**1**	**2**	**3**	**4**
12.	I worry that people don't like me	**1**	**2**	**3**	**4**
13.	I take disappointment so keenly that I can't put them out of my mind	**1**	**2**	**3**	**4**
14.	I get embarrassed easily	**1**	**2**	**3**	**4**
15.	When I suffer from minor illnesses such as a rash I think it is more serious than it really is	**1**	**2**	**3**	**4**
16.	Unpleasant thoughts enter my head against my will	**1**	**2**	**3**	**4**
17.	I worry about my failures and my weaknesses	**1**	**2**	**3**	**4**
18.	I worry about not being able to cope in life as adequately as others seem to	**1**	**2**	**3**	**4**
19.	I worry about death	**1**	**2**	**3**	**4**
20.	I worry about making a fool of myself	**1**	**2**	**3**	**4**
21.	I think I am missing out on things in life because I worry too much	**1**	**2**	**3**	**4**
22.	I have repetitive thoughts such as counting or repeating phrases	**1**	**2**	**3**	**4**

Please check that you have responded to all of the items. Thank you.

Scores:	S	H	M	Total
	☐	☐	☐	☐

ID: Date:

Meta-Cognitions Questionnaire

Developed by Sam Cartwright and Adrian Wells

This questionnaire is concerned with beliefs people have about their thinking. Listed below are a number of beliefs that people have expressed. Please read each item and say how much you *generally* agree with it by *circling* the appropriate number. Please respond to all the items, there are no right or wrong answers.

		Do not agree	*Agree slightly*	*Agree moderately*	*Agree very much*
1.	Worrying helps me to avoid problems in the future	**1**	**2**	**3**	**4**
2.	My worrying is dangerous for me	**1**	**2**	**3**	**4**
3.	I have difficulty knowing if I have actually done something, or just imagined it	**1**	**2**	**3**	**4**
4.	I think a lot about my thoughts	**1**	**2**	**3**	**4**
5.	I could make myself sick with worrying	**1**	**2**	**3**	**4**
6.	I am aware of the way my mind works when I am thinking through a problem	**1**	**2**	**3**	**4**
7.	If I did not control a worrying thought, and then it happened, it would be my fault	**1**	**2**	**3**	**4**
8.	If I let my worrying thoughts get out of control, they will end up controlling me	**1**	**2**	**3**	**4**
9.	I need to worry in order to remain organised	**1**	**2**	**3**	**4**
10.	I have little confidence in my memory for words and names	**1**	**2**	**3**	**4**

		Do not agree	*Agree slightly*	*Agree moderately*	*Agree very much*
11.	My worrying thoughts persist, no matter how I try to stop them	**1**	**2**	**3**	**4**
12.	Worrying helps me to get things sorted out in my mind	**1**	**2**	**3**	**4**
13.	I cannot ignore my worrying thoughts	**1**	**2**	**3**	**4**
14.	I monitor my thoughts	**1**	**2**	**3**	**4**
15.	I should be in control of my thoughts all the time	**1**	**2**	**3**	**4**
16.	My memory can mislead me at times	**1**	**2**	**3**	**4**
17.	I could be punished for not having certain thoughts	**1**	**2**	**3**	**4**
18.	My worrying could make me go mad	**1**	**2**	**3**	**4**
19.	If I do not stop my worrying thoughts, they could come true	**1**	**2**	**3**	**4**
20.	I rarely question my thoughts	**1**	**2**	**3**	**4**
21.	Worrying puts my body under a lot of stress	**1**	**2**	**3**	**4**
22.	Worrying helps me to avoid disastrous situations	**1**	**2**	**3**	**4**
23.	I am constantly aware of my thinking	**1**	**2**	**3**	**4**
24.	I have a poor memory	**1**	**2**	**3**	**4**
25.	I pay close attention to the way my mind works	**1**	**2**	**3**	**4**

		Do not agree	*Agree slightly*	*Agree moderately*	*Agree very much*
26.	People who do not worry, have no depth	**1**	**2**	**3**	**4**
27.	Worrying helps me cope	**1**	**2**	**3**	**4**
28.	I imagine having not done things and then doubt my memory for doing them	**1**	**2**	**3**	**4**
29.	Not being able to control my thoughts is a sign of weakness	**1**	**2**	**3**	**4**
30.	If I did not worry, I would make more mistakes	**1**	**2**	**3**	**4**
31.	I find it difficult to control my thoughts	**1**	**2**	**3**	**4**
32.	Worrying is a sign of a good person	**1**	**2**	**3**	**4**
33.	Worrying thoughts enter my head against my will	**1**	**2**	**3**	**4**
34.	If I could not control my thoughts I would go crazy	**1**	**2**	**3**	**4**
35.	I will lose out in life if I do not worry	**1**	**2**	**3**	**4**
36.	When I start worrying I cannot stop	**1**	**2**	**3**	**4**
37.	Some thoughts will always need to be controlled	**1**	**2**	**3**	**4**
38.	I need to worry, in order to get things done	**1**	**2**	**3**	**4**
39.	I will be punished for not controlling certain thoughts	**1**	**2**	**3**	**4**

		Do not agree	*Agree slightly*	*Agree moderately*	*Agree very much*
40.	My thoughts interfere with my concentration	**1**	**2**	**3**	**4**
41.	It is alright to let my thoughts roam free	**1**	**2**	**3**	**4**
42.	I worry about my thoughts	**1**	**2**	**3**	**4**
43.	I am easily distracted	**1**	**2**	**3**	**4**
44.	My worrying thoughts are not productive	**1**	**2**	**3**	**4**
45.	Worry can stop me from seeing a situation clearly	**1**	**2**	**3**	**4**
46.	Worrying helps me to solve problems	**1**	**2**	**3**	**4**
47.	I have little confidence in my memory for places	**1**	**2**	**3**	**4**
48.	My worrying thoughts are uncontrollable	**1**	**2**	**3**	**4**
49.	It is bad to think certain thoughts	**1**	**2**	**3**	**4**
50.	If I do not control my thoughts, I may end up embarrassing myself	**1**	**2**	**3**	**4**
51.	I do not trust my memory	**1**	**2**	**3**	**4**
52.	I do my clearest thinking when I am worrying	**1**	**2**	**3**	**4**
53.	My worrying thoughts appear automatically	**1**	**2**	**3**	**4**
54.	I would be selfish if I never worried	**1**	**2**	**3**	**4**

		Do not agree	*Agree slightly*	*Agree moderately*	*Agree very much*
55.	If I could not control my thoughts, I would not be able to function	**1**	**2**	**3**	**4**
56.	I need to worry, in order to work well	**1**	**2**	**3**	**4**
57.	I have little confidence in my memory for actions	**1**	**2**	**3**	**4**
58.	I have difficulty keeping my mind focused on one thing for a long time	**1**	**2**	**3**	**4**
59.	If a bad thing happens which I have not worried about, I feel responsible	**1**	**2**	**3**	**4**
60.	It would not be normal, if I did not worry	**1**	**2**	**3**	**4**
61.	I constantly examine my thoughts	**1**	**2**	**3**	**4**
62.	If I stopped worrying, I would become glib, arrogant and offensive	**1**	**2**	**3**	**4**
63.	Worrying help me to plan the future more effectively	**1**	**2**	**3**	**4**
64.	I would be a stronger person if I could worry less	**1**	**2**	**3**	**4**
65.	I would be stupid and complacent not to worry	**1**	**2**	**3**	**4**

Please ensure that you have responded to all items.
Thank you.

ID

Male / Female DoB Married / Widowed / Single / Divorced

Postcode (Previous) Occupation

Diagnosis MMSE

Medication

Hospital admissions in last 6mths

Do you worry? Yes ☐

No ☐

How much do you worry? Hardly ever ☐

Sometimes ☐

Quite often ☐

A lot of the time ☐

Most of the time ☐

What do you worry about?

[prompt list if necessary:
relationships
lack of confidence
aimless future
work
financial]

How does your worrying affect you?

Do you worry about how much you worry?

What do you do to help yourself cope with your worry?

[prompt list if necessary:
try to see positive side
think about ways you've coped before
talk to someone about what to do
do something active e.g. gardening, exercising
eat/smoke/drink more
get irritable with other people]

Do these things work?

What works best?

What do you use most often?

Are there any disadvantages of using these things? Yes ☐ No ☐

If yes, what are they?